THE BUILDER

INCORPORATING

"ARCHITECTURE" AND "THE BRITISH ARCHITECT"

VOL. CLXVI. MAY 19 1944 No. 5285

15 1944

THE NEW SCHOOLS

THE Committee appointed by the President of the Board of Education, with Sir Robert Wood as chairman, has now reported on the steps needed to make up for the serious leeway due to the stoppage of school building during the war, added to the demand for new and improved accommodation arising from the present policy of educational reform and reconstruction.*

This policy visualises school building greatly in excess of pre-war programmes, and while admitting that housing will have the first call on labour and materials, it is claimed that the provision of adequate school premises must be regarded as an essential part of any housing development. The County Architects' Society, when consulted, was inclined to think it might not be either necessary or expedient to abandon traditional methods, but it was ultimately agreed by this body that, should such methods prove insufficient to meet the post-war situation, the suggestions embodied in this Report would prove valuable. These cover forms of construction on lines similar to those worked out by the M.O.W., and include a large proportion of factory-made elements which are appropriate in the case of school buildings by reason of the extent to which units of standard dimensions can be employed.

On another page we give an indication of these proposals which are outlined in Appendix II of the Report. While it is admitted that ideally each new building should be treated individually, considered in relation to its particular site and environment, the interest of the children demands measures that will secure, as rapidly as possible, a substantial increase of school accommodation provided that it is of sound design and adapted to the requirements of the educational scheme.

The advantages of a greater degree of standardisation are both administrative and technical. It will expedite the preliminary work connected with the preparation of estimates and placing of contracts, as well as the actual construction and equipment of the buildings. The basic requirements of schools of the same type are substantially identical, and though the character of the site may dictate a different grouping of the main sections of the whole, these sections usually conform to definite dimensions and proportions, and are so far predetermined in planning as to make these acceptable. There are four main items in the usual school: the assembly hall, with which is grouped the cloakrooms and lavatories; the gymnasium, with changing rooms, etc.; the classrooms, and the art and practical rooms, which latter can be dealt with together, as the same roof span is suitable for both—namely, 24 feet.

As the hall and gymnasium are some 10 feet higher than the other rooms, they can be mainly lit from above the level of these, which makes it easy to plan the subsidiary accommodation around them where the site is limited in area, the main entrance being in proximity to the hall. It is desirable that the class and practical rooms should have a south-easterly aspect, but for the art room north-east lighting is preferable; these can be ranged in one block with a low corridor along the north-west side or in a series of pavilions at right angles and on both sides of a connecting corridor. With normal building these may well be on two storeys, but this is not so suitable for the kind of construction here proposed.

In view of probable changes in the educational programme it is important that school plans should be such as to render expansion comparatively easy, and with the types of plan recommended, this, assuming the site to be adequate, does not present any great difficulty. With a limited site, the alternative of providing in advance for the addition of an upper floor is a practicable one, though this has disadvantages as compared with extensions on the level.

It is considered that the developments in teaching may affect the range of subjects, rather than methods which would affect the dimensions and types of rooms, and that therefore the proposed standardisations are justified. It is not intended to urge the adoption of any one model plan or a limited number of layouts to be used for all schools; this would be impracticable because of the variation of sites; the plans given are not to be regarded as actually embodying decisions of official policy or for criticism on points of detail, but more as illustrations indicating the wide variety of treatment and grouping compatible with the use of standardised construction.

Neither is it envisaged to exclude the employment of traditional methods where the local supply of labour and materials makes this possible, nor the combination of such methods with standardised elements. A competent architect well versed in school requirements will be able to decide on the best course to pursue. The intention is to base the system of design on (*a*) the structural element, a stanchion or truss; (*b*) the bay unit, suggested as mainly 8 ft. 3 in.; (*c*) the plan unit, the number of bay units to the various rooms; and (*d*) the plan scheme, the assembly of plan units to form the complete school. Thus the classroom measures three plan units each way and the average practical room three units in width by five in length, but it is suggested that even this system may not be universally applicable and that in some cases modifications may be necessary.

The work of the Committee has, it is stated, been mainly directed to primary and secondary schools; the numerous technical schools and colleges that will be needed would, owing to their scale and the variety of their requirements, lend themselves less readily to any system of standardisation, and each presents its own problem. At the same time some additional accommodation for technical education is likely to be required in connection with secondary schools, and in this case there would be little difficulty in making it conform to the standards adopted.

This Report has been most carefully prepared and well repays study.

* Post-War Building Studies, No. 2.—Standard Construction for Schools. H.M. Stationery Office. 6d.

NOTES AND NEWS

PRINCIPAL CONTENTS

ARTICLES.	Page
LEADER : The New Schools ...	395
WAR DAMAGED CHURCHES : W.D. Commission's Scheme for Repairs	400
LOCAL AUTHORITY HOUSES AND FLATS : New Scale of Architects' Fees for Conversion ...	404
THE TOWN PLANNING INSTITUTE	405
REPLANNING AN ANCIENT CITY. Address at Exeter by Mr. Eden	406
REGISTERED HOUSE BUILDERS : Memorandum on Physical Reconstruction of Britain	407
WAGES, PRICES CURRENT ...	409-11
FUTURE CONSTRUCTION	412-14

ILLUSTRATIONS.	
STANDARD CONSTRUCTION FOR SCHOOLS : Designs from the Report	399
EXPERIMENTAL HOUSES AT COVENTRY. By G. Grey Wornum and Richard Sheppard ...	401

The "Churchill Houses."

A CORRESPONDENT writes: I understand that Mr. L. H. Keay, the far-sighted City Architect of Liverpool, has put forward an ingenious way of meeting difficulties which may arise in the siting of temporary housing. Mr. Keay has always maintained an open mind on the possibilities of prefabrication, but stated in his recent report to his Housing Committee "so far, he is unable to advise the Committee that there is any better method of house-building than the traditional brick and timber-carcassed house." If the Churchill temporary houses are offered to Liverpool, it is proposed to erect them on the best housing sites available, on the principle that they will be pulled down at the earliest possible moment. If erected in back areas out of sight there is a danger that the temporary house may become permanent.

A.A. Council.

FOLLOWING are the officers and Council of the Architectural Association for Session 1944-45 :—

President: A. F. B. Anderson, F.R.I.B.A., S.A.D.G.
Vice-Presidents: Eric L. Bird, A.R.I.B.A., and G. R. Dawbarn, M.A., F.R.I.B.A.
Hon. Secretary: Henry Braddock, A.R.I.B.A.
Hon. Treasurer: D. L. Bridgwater, F.R.I.B.A.
Hon. Editor: J. N. Summerson, A.R.I.B.A.
Hon. Librarian: Ralph Tubbs, A.R.I.B.A.
Past President: Arthur W. Kenyon, F.R.I.B.A.
Ordinary Members of Council: Edward W. Armstrong, F.R.I.B.A., Mrs. Anthony Cox, A.R.I.B.A., R. E. Enthoven, F.R.I.B.A., J. H. Forshaw, F.R.I.B.A., John Grey, F.R.I.B.A., Dr. Charles Holden, F.R.I.B.A., G. A. Jellicoe, F.R.I.B.A., Alfred S. Knott, A.R.I.B.A., E. B. O'Rorke, F.R.I.B.A., T. S. Tait, F.R.I.B.A.

L.M.B.A. and American Building Methods.

SINCE the publication of the Report of the recent Government Mission to the United States, of which Sir George Burt (a member of the L.M.B.A.) was a member, the London Master Builders' Association has had a Committee at work considering the application of the many suggestions made in the Report to London building conditions after the war.

The Committee consists of Major Leslie Shingleton, M.C., and Mr. B. T. Rice-Pyle. They have now presented their suggestions to the Administrative Committee of the L.M.B.A., which is to consider them at its next meeting.

A Croydon Planning Exhibition.

CROYDON Borough Labour Party has set up a sub-committee to investigate the requirements of the average person in regard to houses and general amenities. A report has been made to the General Council. The Party's Housing Committee have now decided to promote a Housing and Town Planning Exhibition, to be held at the Crown Hotel for one week, and opened on June 10 by Mr. R. Coppock, C.B.E. The committee desire models or plans and layouts for houses, bungalows, flats, churches, schools and nursery schools, civic centres, roads, bridges, parks, gardens, playing fields, sports arenas, etc. Those interested should write to Mr. F. Morey at 166, Albert-road, S.E.25.

Appointments.

MR. C. G. CRAVEN, Sheffield Corporation Town Planning Officer, has been appointed Planning Officer to the Central and South-East Scotland Regional Planning Committee, whose area covers over 2½ million acres, including Edinburgh.

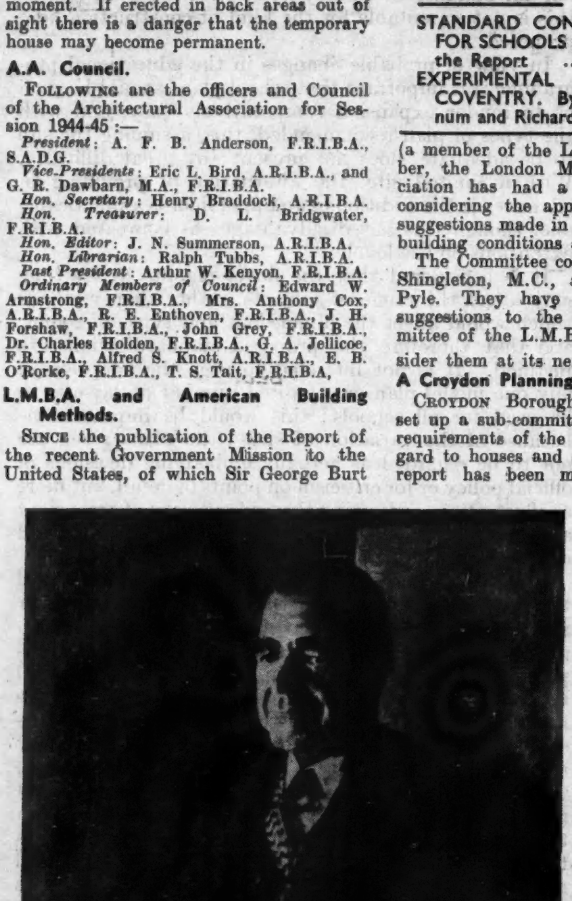
PROFESSOR S. D. ADSHEAD and MAJOR C. W. C. NEEDHAM, who are preparing a redevelopment plan for York, have been appointed town-planning consultants to Hartlepool Borough Council.

MR. E. A. FERRIBY, B.Arch., A.R.I.B.A., has been appointed principal assistant architect to the Southampton Borough Architect, Mr. H. Bennett, F.R.I.B.A., A.I.L.A.

Professional Announcements.

MESSRS. DEARLE AND HENDERSON, chartered quantity surveyors, have taken into partnership Mr. E. W. Horton, F.S.I., who has been with the firm for 25 years. The title of the firm will remain unaltered. On and after May 6 the address will be 123, Victoria-street, S.W.1 (Tel. : Vic. 5946). The firm will be pleased to receive trade catalogues.

MR. ALEC FELDMAN, A.I.A.A., who lost nearly all his catalogues during military service, will be glad to receive further copies from manufacturers at 26, Ventnor-villas, Hove, 3, if wartime conditions permit.



R.A. EXHIBITION, 1944.

R. Coppock, C.B.E., J.P., Chairman of the London County Council.
A Painting by A. R. Thomson, A.R.A. (By courtesy of the L.C.C.)

From *The Builder* of 1844

Saturday, May 18, 1844. *Price* 3*d. net.*

THE ATMOSPHERIC RAILWAY.—The paper read [at the Institution of Civil Engineers] commenced with the general principles of the system, describing it as a system of working railways, in which the moving power is communicated by means of a continuous pipe or main laid between the rails, and for exhaustion divided by valves into suitable lengths. A partial vacuum is formed in the pipe by air-pumps, worked by machinery at intervals along the line. Along the upper side of the main is a continuous aperture. . . . A piston is attached at some distance in front of and beneath the leading carriage of the train. When a vacuum is formed in the main in front of the piston . . . the air, impinging on the other side of the piston, carries it forward with a velocity due to its pressure upon the area of the piston, which, being attached to the leading carriage, carries the train forward with it.

*** This extraordinary apparatus, the developers of which were Messrs. Clegg and Samuda, was actually put into operation on the line between Kingstown and Dalkey, near Dublin. The cost per mile was claimed to be about 5½d. per mile haulage, as against 1s. 3d. for working by steam locomotives. Subsequent to this report, we find in *The Builder* (June 1, 1844) a letter from one Henry Pinkus, complaining that the patent valve on which the railway depends is his invention. Several plans for such railways were laid, notably for one from Croydon to Epsom, but, largely on data as to wastefulness of power given by George Stephenson, the system became discredited and was abandoned.

COMING EVENTS

Tuesday, May 23.

THE HOUSING CENTRE. Ald. W. Hyde, C.B.E., on "Health Services and Town Planning." 13, Suffolk-street, S.W.1. 1.15 p.m.

THE ROYAL SANITARY INSTITUTE. Mr. H. J. Manzoni, C.B.E., on "Sanitation in Post-War Building." 90, Buckingham Palace-road, S.W.1. 2.30 p.m.

Wednesday, May 24.

INSTITUTION OF STRUCTURAL ENGINEERS. Further discussion on Mr. D. T. Lloyd-Jones's paper on "A New Approach to the Æsthetics of Engineering Structures." 11, Upper Belgrave-street, S.W.1. 5.15 p.m.

INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS. Mr. W. Dobson Chapman, P.T.P.I., on "Town and Country Planning in Physical Reconstruction." 75, Eaton-place, S.W.1. 6 p.m.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. Sir Alfred Egerton, F.R.S., on "Trends in the Development of Heating and Ventilating Installations." At Mechanical Engineers, Storey's-gate, S.W.1. 6 p.m.

Thursday, May 25.

TOWN PLANNING INSTITUTE. Mr. W. L. Waide on "Planning and Social Statistics." Essex Hall, Essex-street, Strand, W.C.2. 6 p.m.

CORRESPONDENCE

[Whilst we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

The M.o.W. Steel House.

To the Editor of *The Builder*.

Sir,—The accompanying plan is based on the suggestions made in your leading article last week as to possible variations to remedy the disadvantages then pointed out. The lobby connecting the two bedrooms with the bathroom does not entail a material sacrifice of floor space, as the doors being placed diagonally do not encroach on useful space in the rooms. The altered position of the fireplace extends the hot-water service somewhat, but on the other hand the warming of the bedrooms is made easier. This is necessary if access from the hall to the living-room is demanded, and it actually makes a pleasanter place of the fireside, with good lighting in the day time.

H. V. Lanchester.

Weybridge, Surrey.

To the Editor of The Builder.

Sir,—It was with considerable interest that I studied the plan and photographs of the above house published in your issue of the 5th inst.

This house has been erected to enable the public to inspect it and make suggestions as to any improvements that might be embodied in its design.

With this in view, I have taken the liberty of making a plan (enclosed herewith) having similar accommodation, including the admirably designed fitments, and of the same superficial area as that of the M.o.W. design, which overcomes some of the defects which I think most housewives would find in its arrangement—among which are the following:—

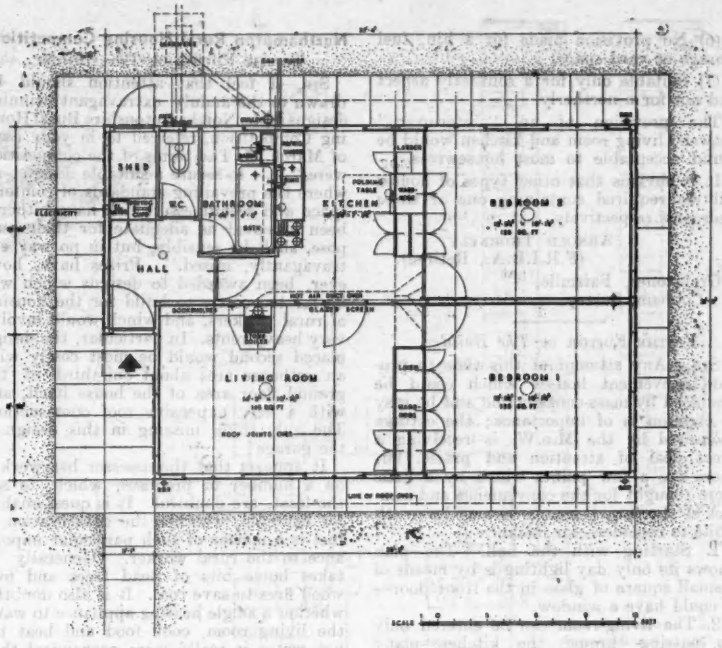
(1) No direct access to the living room, which is approached only through the kitchen.

(2) Access to the two bedrooms through the living room and kitchen.

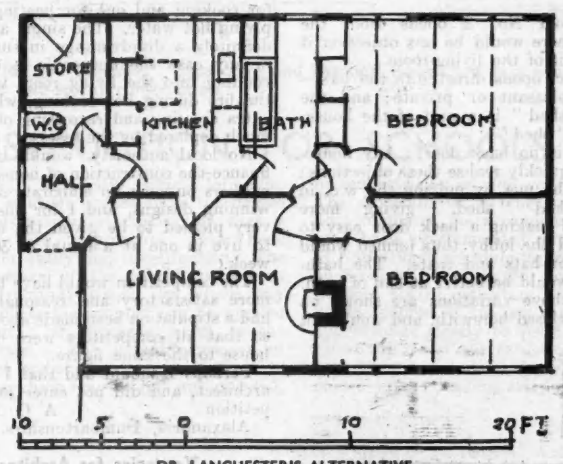
(3) Access to bathroom and w.c. from the bedrooms through the living room and kitchen.

(4) The omission of a back door which necessitates the conveyance of fuel, refuse and washing through the front door.

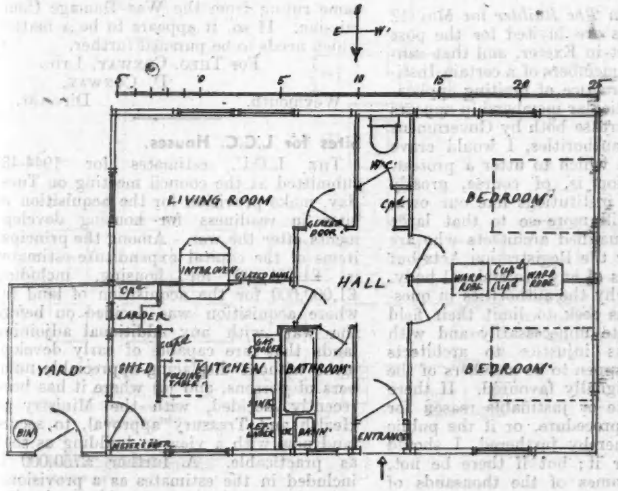
(5) The shed (presumably provided for a bicycle or perambulator) inconveniently placed and too small for that purpose.



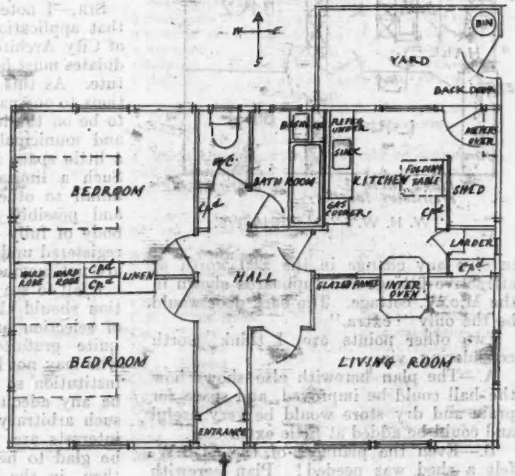
THE M.O.W. HOUSE : THE OFFICIAL PLAN.



DR. LANCHESTER'S ALTERNATIVE.



For a North Frontage.



For a South Frontage.

SIR ARNOLD THORNELY'S ALTERNATIVES.

(6) No provision made for a bin, fuel storage or yard space.

(7) Suitable only for a southerly aspect and not for a northerly.

The provision of an "Inter-oven" between living room and kitchen would be found acceptable to most housewives.

It is obvious that other types of houses will be required containing one or three bedrooms respectively.

ARNOLD THORNELY
(F.R.I.B.A., Retired).

Greystones, Fairmile,
Cobham, Surrey.

TO THE EDITOR OF *The Builder*.

SIR,—Any attempt at this time to provide convenient houses which could be produced by mass-construction and be easy of erection is of importance; the cottage sponsored by the M.o.W. is receiving a great deal of attention and praise, but there are a few points which by a little more thought for the convenience and comfort of the future occupants may be worth while to consider—for instance :—

1. Starting with the hall. The plan shows its only day lighting is by means of a small square of glass in the front door—it could have a window.

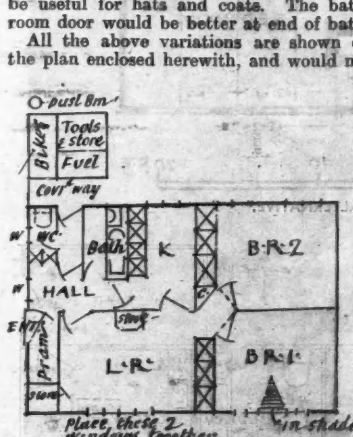
2. The living-room can be entered only by passing through the kitchen—many wives might object to that. It need not be so.

3. Bedroom No. 2 opens from the kitchen. There would be less objection if it opened out of the living-room.

4. The w.c. opens direct into the hall—not quite pleasant or private; and the so-called "shed" is a part of the house, and not a "shed."

5. There is no back door. Any housewife would quickly realise these objections; they could be met by putting the w.c. in space marked "shed," giving more privacy and making a back door easy to provide, and the lobby thus formed would be useful for hats and coats. The bathroom door would be better at end of bath.

All the above variations are shown on the plan enclosed herewith, and would not



"W. H. W.'s" ALTERNATIVE.

involve any change in the £80 worth of attractive fittings and cupboards shown in the M.o.W. cottage. The back door would be the only "extra."

Two other points are, I think, worth considering, viz. :—

A.—The plan herewith also shows how the hall could be improved, and space for pram and dry store would be very useful and could be added at little extra cost.

B.—Even the planners of the M.B.W. felt a shed was needed! Plan herewith shows in a convenient position a shed for bikes, tools, stores and fuel.

W. H. W., F.R.I.B.A.

Northampton Rural Housing Competition.

TO THE EDITOR OF *The Builder*.

SIR,—I feel that attention should be drawn to the unduly extravagant winning designs in the Northamptonshire Rural Housing Competition, referred to in your issue of March 24. The terms of the competition were " . . . to secure a suitable design . . . where the prevailing standards of comfort, space and seemliness, which have hitherto been accepted as adequate for their purpose, shall be sensibly, but in no way extravagantly, raised." Prizes have, however, been awarded to designs which will be far too costly to build for the housing of rural workers, and which would involve very heavy rents. In particular, the design placed second would be most costly with an outhouse area about one-third of the ground floor area of the house itself, and with a very expensive roof construction. The only thing missing in this design is the garage!

It appears that the assessor has worked on a number of premises, which, to say the least, are doubtful. It is questionable, for example, whether the conservation of fuel is a matter of such particular importance to the rural worker. Generally he takes home bits of dead trees and uses wood fires to save coal. It is also doubtful whether a single heating appliance to warm the living room, cook food and heat the hot water is really more economical than fuel for two separate appliances, say, one for cooking and one for heating and supplying hot water. The single appliance is definitely a disadvantage in summer, and in any case the housewife is continually running into the living room to stoke up the fire during her cooking, which means extra crossing and recrossing of rooms, so much deplored by the assessor.

No local authority would be able to finance the construction of houses for rural workers on such an elaborate scale as the winning designs, and I for one would be very pleased to be given the opportunity to live in one at a rental of 30s. or so a week.

The competition would have led to much more satisfactory and reasonable designs had a stipulation been made about the cost, so that all competitors were designing a house to the same figure.

Perhaps I should add that I am not an architect, and did not enter for the competition.

A. G. ALLNUTT.

Alexandria, Dumbartonshire.

Vacancies for Architects.

TO THE EDITOR OF *The Builder*.

SIR,—I note in *The Builder* for May 12 that applications are invited for the post of City Architect in Exeter, and that candidates must be members of a certain Institute. As this practice of limiting applications to one particular membership appears to be on the increase both by Government and municipal authorities, I would crave a little space in which to utter a protest. Such a limitation is, of course, grossly unfair to other institutions like our own, and possibly still more so to that large body of fully qualified architects who are registered under the Registration Acts but are not members of any professional body.

I fail to see why the authorities in question should thus seek to limit their field of selection quite unnecessarily and with quite gratuitous injustice to architects who may not happen to be members of the institution so signally favoured. If there be any adequate or justifiable reason for such arbitrary procedure, or if the public interests are thereby furthered, I should be glad to hear it; but if there be not, then, in the names of the thousands of architects who are not members of the institution in question, I must request some explanation.

So far as I know, this practice is not followed in other professions; or if a particular institution is named, the qualifying phrase "or other like qualification" is invariably inserted. This seems to be much more in accordance both with common sense and common justice.

G. B. J. ATHOE, Secretary,
Incorp. Assn. of Architects and
London, S.W.1. Surveyors.

Repair of War Damage.

TO THE EDITOR OF *The Builder*.

SIR,—An interesting point has arisen in correspondence with the War Damage Commission to which we would like to call attention, and, if possible, ascertain the experience of others.

A fairly large dwelling-house, privately owned, was lent rent free for the use of a school which had been bombed out of their own premises. This house received war damage, and windows were covered with felt or linen in the usual way. After some months this temporary covering required reinstatement with glass in order to provide proper light and protection. As most of the glass had originally been plate, and the school is in a vulnerable area, which had experienced repeated bombing, sheet glass, mainly of the "R" type, was used for this as temporary reinstatement, it being deemed unwise in the public interest to replace with plate glass, in view of the likelihood of further damage occurring.

In making payment for this work, the War Damage Commission have stated that they are not empowered to pay the cost of final reinstatement in plate glass after the war, but that the Commission may entertain a claim for the cost of this, less the cost already incurred of the temporary reinstatement.

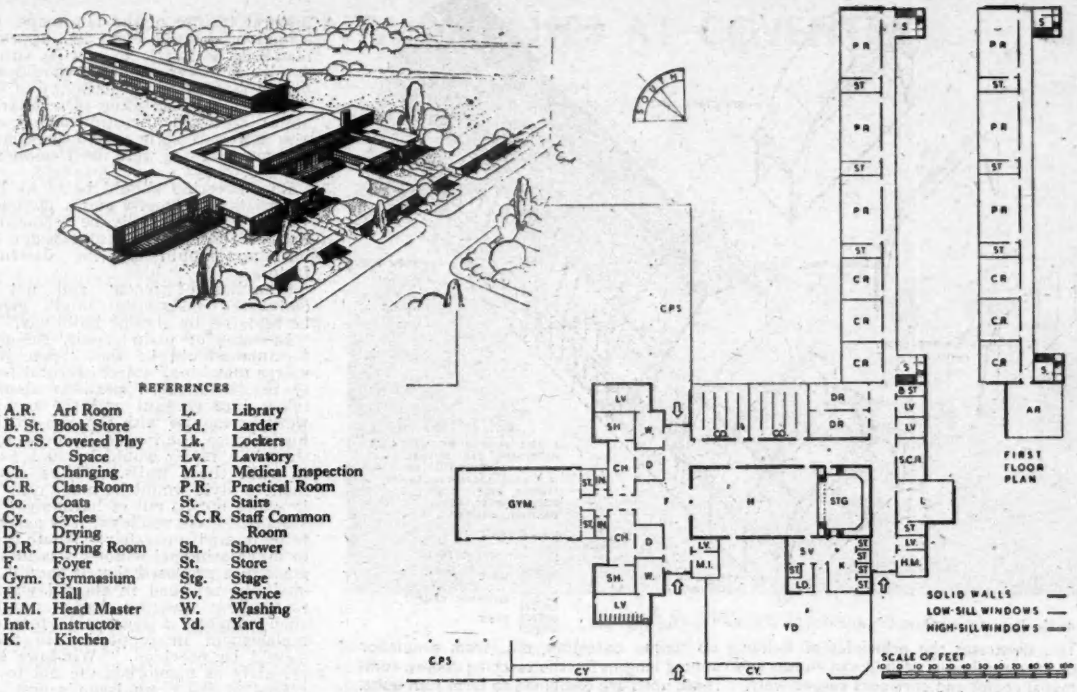
This policy appears to be against the public interest, and, moreover, contrary to the principle adopted by the Commission to pay for the insertion of semi-permanent panels of wallboard with inset display panels of sheet glass in shop windows, and later to pay for the full reinstatement in plate glass. The Commission's argument is that they are not empowered to pay for more than two processes, i.e., temporary works and final reinstatement. The covering of windows with felt or linen cannot be compared with the semi-permanent panelling of shop windows.

It is probable that many similar cases have arisen, and as this is not an isolated case in our own experience we shall be glad to know whether others have received the same ruling from the War Damage Commission. If so, it appears to be a matter which needs to be pursued further.

FOR THEO. CONWAY, LTD.,
D. CONWAY,
Weymouth. Director.

Sites for L.C.C. Houses.

THE L.C.C. estimates for 1944-45, submitted at the council meeting on Tuesday, make provision for the acquisition of sites in readiness for housing developments after the war. Among the principal items of the capital expenditure estimates is £1,051,300 for housing, including £1,000,000 for the acquisition of land (*a*) where acquisition was decided on before the war, with any additional adjoining lands that are capable of early development without displacing appreciable numbers of persons, and (*b*) where it has been recently decided, with the Ministry of Health and Treasury approval, to secure land now with a view to building as soon as practicable. A further £750,000 is included in the estimates as a provisional sum for acquisition of additional sites under schemes which may be submitted later to the Council.



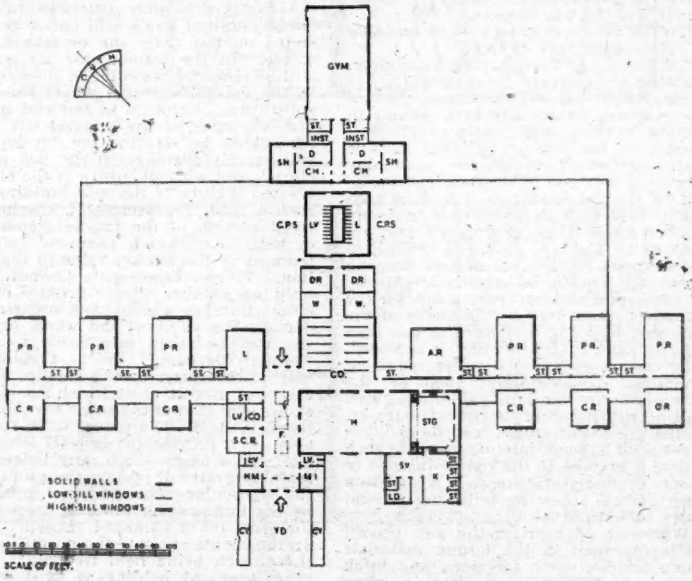
From the Report "Standard Construction for Schools."

Perspective and Plans of a Modern School for 360 Children. Classrooms and Practical Rooms are in a wing of two-storey construction.

STANDARD CONSTRUCTION FOR SCHOOLS

THIS Report* forms one of the series being published under the title of Post-War Building Studies, and has been prepared by a committee, under the chairmanship of Sir Robert Wood, Deputy-Secretary to the Board of Education, on which have served a number of architects of special experience in school design. "The problem before us," states the committee, "obviously admits of more than one solution, according to the degree of standardisation in construction that is desired. Two approaches have been selected for study and investigation. The first conceives of the school as a connected structural whole, to which any dimensional factor adopted can be applied throughout. It proceeds direct to the plan scheme. The second conceives of the school rather as a group of separate plan units which may be left unconnected, or connected by *in situ* work, as desired." The Appendix II of the committee's report compares the accommodation on the unit basis recommended with the Board of Education's schedule in their pamphlets on Secondary Schools (86) and Elementary Schools (107), indicating that the standards adopted in the accompanying plans approximate closely to these. The plans given will assist our readers in visualising the intentions indicated, which are discussed in the leading article on page 395.

* Standard Construction for Schools. Stationery Office. Price 6d.



Modern School for 360 children. A classroom is not shown for each class, but the necessary additions could easily be made.

Accommodation actually shown:

6 classrooms	24 ft. 9 in. × 24 ft. 9 in.	= 613 sq. ft.
6 practical rooms	24 ft. 9 in. × 41 ft. 3 in.	= 1020 sq. ft.
1 Art room	33 ft. × 33 ft.	= 1089 sq. ft.
1 Library	24 ft. 9 in. × 33 ft.	= 816 sq. ft.
1 Hall	74 ft. 3 in. × 41 ft. 3 in. plus stage.	= 3062 sq. ft.
1 Gymnasium	74 ft. 3 in. × 41 ft. 3 in. plus stores, cloakrooms, changing rooms, lavatories, etc.	= 3062 sq. ft.

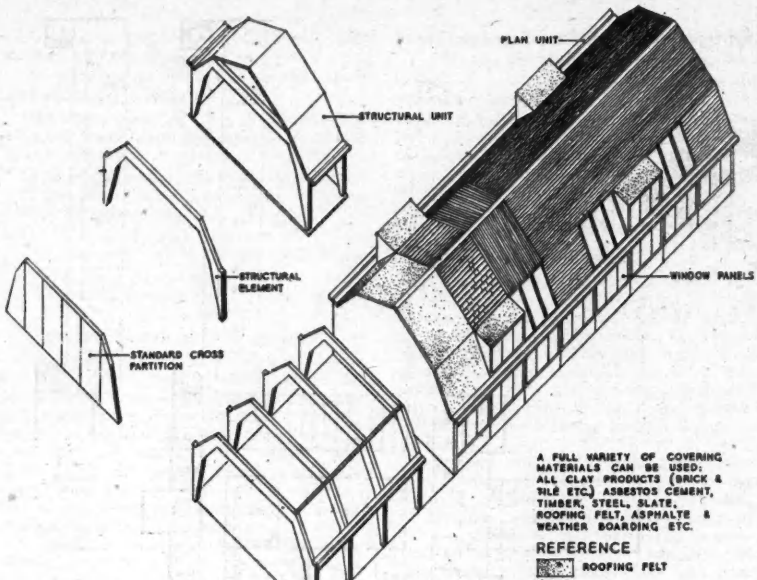
All dimensions are gross, and take no account of wall thicknesses.

REFERENCES

A.R.	Art Room	K.	Kitchen
C.P.S.	Covered Play Space	L.	Library
		Ld.	Larder
Ch.	Changing	Lv.	Lavatory
C.R.	Class Room	M.I.	Medical Inspection
Co.	Coats	P.R.	Practical Room
Cy.	Cycles	S.C.R.	Staff Common Room
D.	Drying	Sh.	Shower
D.R.	Drying Room	St.	Store
F.	Foyer	Stg.	Stage
Gym.	Gymnasium	Sv.	Service
H.	Hall	W.	Washing
H.M.	Head Master	Yd.	Yard
Inst.	Instructor		

From the Report "Standard Construction for Schools."

Plans of another Modern School for 360 children.


PLAN UNIT
STRUCTURAL UNIT
STRUCTURAL ELEMENT
WINDOW PANELS
STANDARD CROSS PARTITION
STEEL, REINFORCED CONCRETE OR TIMBER
A FULL VARIETY OF COVERING MATERIALS CAN BE USED: ALL CLAY PRODUCTS (BRICK & TILE ETC.) ASBESTOS CEMENT, TIMBER, STEEL, SLATE, ROOFING FELT, ASPHALTE & WEATHER BOARDING ETC.
REFERENCE
ROOFING FELT
SLATE
ASBESTOS CEMENT
TILES

From the Report "Standard Construction for Schools." (See page 399.)

This illustrates the principles of building up rooms, corridors, etc., from a number of structural units of uniform widths and running lengths for the teaching rooms, communal rooms and corridors respectively. These units are combined to form plan units.

WAR DAMAGED AND DESTROYED CHURCHES

SCHEME FOR REBUILDING AND REPAIR

THE following statement is issued by the War Damage Commission:—

Nearly 14,000 churches, monasteries, convents, and other ecclesiastical buildings have suffered varying degrees of damage in enemy raids on Great Britain and Northern Ireland. The working out of a scheme which would present an equitable adjustment of a considerable problem has involved a long series of consultations between the War Damage Commission and a Committee, presided over by the Bishop of London, representing the Christian Churches.

Agreement upon procedure has now been reached on terms which are set out in an exchange of letters between the Commission and the Christian Churches Committee. They will provide a basis upon which denominational authorities will be able to make plans and submit proposals to the Commission in respect of their particular churches. "Church" is defined as including not only the church or chapel proper, but also those ecclesiastical buildings which are either:—

(1) Buildings which are under the same roof as the church or chapel, are structurally one with it, and form with it in effect a single building of which they are a subsidiary part, as distinct from buildings of which a church or chapel forms a subsidiary part; or

(2) Buildings (not houses of residence or non-provided schools) essential to the church or chapel for the purpose of its religious work and which form with the church or chapel a compact group of buildings making a single unit for that purpose where their sites are not separated by non-ecclesiastical properties or by a public street.

It is accepted that any ecclesiastical building other than a church as defined above shall receive the same treatment as secular properties of corresponding type, and that non-provided schools should be treated in the same way as provided schools.

The basis sought in the negotiations between Commission and Committee was one which would provide the churches with war damage payments approximately equivalent in total to that which they would have received had the payments been assessed on the normal basis, but which would spread the amount available more equally and so enable the repair or rebuilding to a reasonable standard of each damaged church. Tests based on market value have been disregarded on the ground that the market value of a church is too hypothetical to be capable of precise ascertainment. It is agreed, therefore, that in place of the cost of works or value payment which would have been appropriate in any ordinary case there shall be awarded a "church payment," to be assessed as the smaller of the two following amounts:—

(1) The reasonable cost of "plain repair" of the war damage.

(2) The reasonable net cost of building a "plain substitute church."

"Plain" is to be interpreted as implying that unnecessary ornamentation has been omitted and allowance made for undue size and serious structural defects in the old building, and "plain substitute" church as the sort of building in type and size which might be reasonably erected on the site of the damaged building by the denomination if it were paying the bill from its own funds and were neither financially embarrassed nor unduly rich. The type of church erected in recent years for the use of new housing areas will not, it is agreed, necessarily be the appropriate measuring rod, for the situation, character, and tradition of the damaged building will have to be taken into account. "There will," it is added, "be certain exceptional cases requiring individual consideration, such as the case where the war damaged building was, and notwithstanding the war damage remains, for architectural, historic or other reasons of special importance. In such a case it may be in the public interest to secure exact reinstatement." Apart from such special cases the following general rules will apply:—

Wherever appropriate the aim should be replacement in the former materials (for example, stone for stone and brick for brick). In particular, where in urban areas the church stood in a prominent position, and in rural districts formed an integral feature of the landscape, reconstruction should be in appropriate materials and style to suit its situation. A former tower or spire should be replaced (except where harmony of design may permit substitution of a tower for a spire) although the dimensions of the new tower or spire would be smaller if the new building were itself smaller than the old.

Roof covering should be of as lasting materials as formerly and a pitched roof should not necessarily be replaced by a flat roof; the situation and design of the building should be the determining factors.

Churches of recent and not over-elaborate construction might generally be replaced by similar buildings.

In cases of plain repair, the general formula should be that "patching involves matching." Architectural features of the undamaged portions should be taken into account and the new plain work harmonise with the old, so that if, for instance, the four walls alone remain, the plain repair would be such as to fit in with those walls. Thus repair of modern style would be made only where it would not be out of harmony.

Stained-glass windows, it is agreed, are to be treated separately. Where the East or other principal window was in stained glass it is proposed that it should, if desired, be replaced in stained glass, and that where a church had a number of such windows a reasonable measure of replacement in proportion to the loss should be provided. Windows erected privately as memorials are not to be replaced at the Commission's cost merely because they are memorial windows.

In order to arrive at the amount of the "church payment," costs are to be assessed on prices ruling at the date when work is done. Regard will be paid to such factors as obsolescence, redundancy and structural defects in a building which is being replaced. But, bearing in mind that the payment may represent the cost of a smaller or plainer new building, it is agreed that while deductions in respect of these three factors should be taken into full consideration where the new church is to be of the same size as the former, it will be proper to set them off as far as possible against any saving accruing from the fact that the new building is to be smaller than the old. Nor will deductions be made in respect of these items so far as they relate to a feature of the old building not to be repeated in the new.

A damaged church structure, unless it is not required at all, will either be reinstated on the same site or rebuilt elsewhere. In the former case no account will be taken of the value of the site save in the exceptional case where the plain substituted church is so reduced in size that a portion of the original site could reasonably be set free for development without disadvantage to the use of the church and without injury to the character and dignity of the new building. In such a case, irrespective of whether the freed portion of the site is disposed of or not, the "church payment" will be reduced by the market value of that portion. Where, however, a church is rebuilt on another site to replace one or more churches which have suffered war damage the value of the whole original site will be taken into account. The "church payment" by the Commission will be decreased by the amount of any excess of market value which the old site shows over that of the new. On the other hand, if the old site proves to be so valuable as to provide funds both for a new site and a new church, any balance remaining over will remain the property of the particular body and is not to be used by the Commission towards its payment for some other damaged church. These arrangements apply to the normal case of the church being held freehold. Such other types of holding as exist will be dealt with on the merits of each particular case.

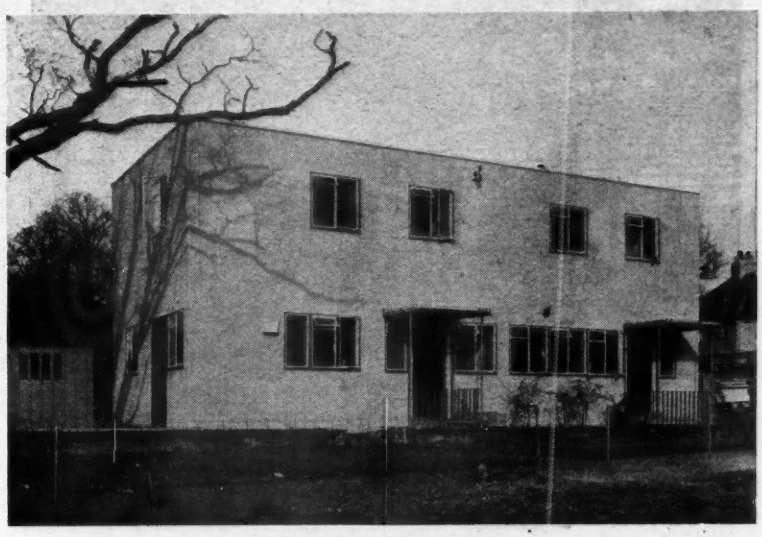
EXPERIMENTAL HOUSES AT COVENTRY

USING THE "UNIBUILDING" SYSTEM OF CONSTRUCTION.

G. GREY WORNUM, F.R.I.B.A., AND RICHARD SHEPPARD, A.R.I.B.A., CONSULTING ARCHITECTS.

TWO EXPERIMENTAL HOUSES HAVE BEEN erected at Canley, Coventry, to a system of construction developed by three firms—Gyproc Products, Ltd., J. Brockhouse and Co., Ltd., and Joseph Sankey and Sons, Ltd.—in conjunction with their consultant architects, Messrs. G. Grey Wornum, F.R.I.B.A., and Richard Sheppard, A.R.I.B.A. Mr. George Wright, M.I.Struct.E., was the designing engineer.

The system, which has been termed "Unibuilding," is a technique of assembling essentially factory made construction units into buildings of one or two storeys. The technique is simple: Light steel frames fabricated from cold rolled steel sections are produced in standard sizes for walls, ceiling and roof members which can be made to span up to 24 ft. This steel frame is rapid in erection; four semi-skilled men can erect the steel frame for one house on ordinary foundations in a few hours. A clipping device for holding the exterior cladding permits a choice of several alternative facing materials, thus avoiding monotony. Floor slabs are of 2½ in. aerated concrete covered with lino or composition, but if wood is available and desired floorboards can be laid directly on the trusses. The roof may be flat or pitched, the former being rather more economical when used with aerated concrete slabs with slight slopes and finished with built-up "Ruberoid" or similar finish. Windows are mounted in the steel chassis wall frames, and sizes can be varied by pre-selection in designing to meet most normal requirements. Interior walls and partitions are formed by the use of ¼ in. fireproof plasterboard, jointed with flush metal panel strip. As the walls are hollow, any type of plumbing, whether factory designed and produced units or *in situ* construction, can be incorporated in the design, as is the case with the electrical services.

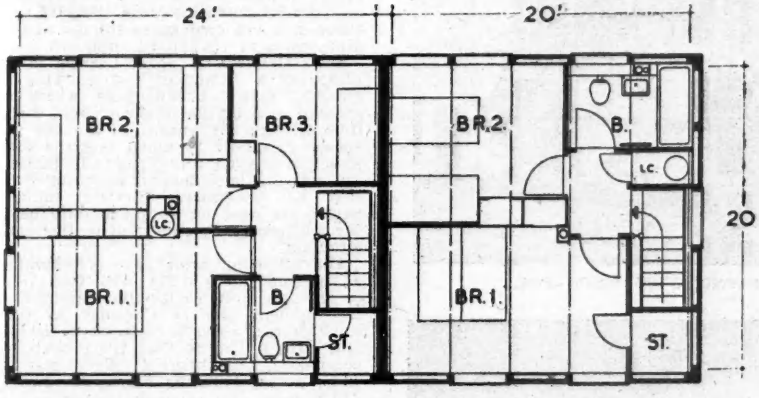


PAIR OF COMPLETED HOUSES.

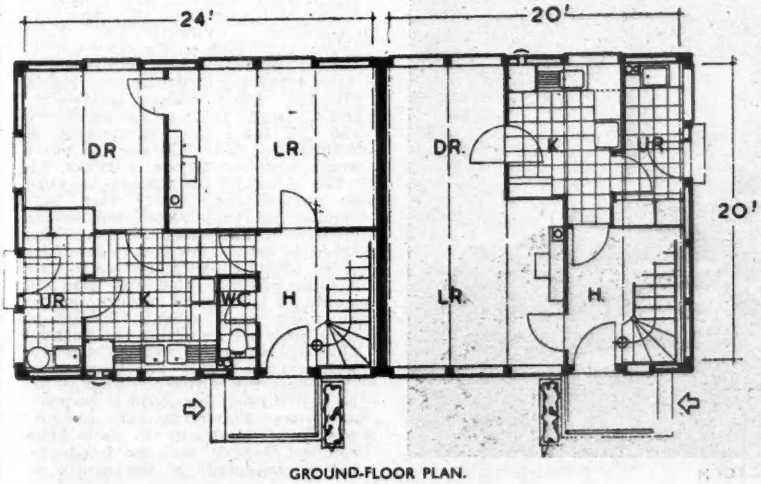
The insulation provided is claimed to allow a heat loss in B.T.U.s of only 0.165 per sq. ft. per hour per deg. Fahr., compared with a corresponding figure of 0.42 where a plastered 9 in. brick wall is used.

Flexibility is claimed as one of the chief assets of the system; the fact that the trusses span either 20 ft. or 24 ft. and can also be shortened for trimming to provide openings for standard uses and other features means that freedom is obtained in the disposition of the internal partitions, none of which is load-bearing. The main application of the units is in the rapid erection of buildings in the following classes; Houses—detached, semi-detached, terrace, or bungalows; schools and nursery schools; hospital and sanatoria units; and office building units.

The construction is based on an entirely dry technique, thus reducing site work enormously as compared with traditional "wet" building methods. The cost is approximately the same as of a brick house of equal accommodation.



FIRST-FLOOR PLAN.



GROUND-FLOOR PLAN.

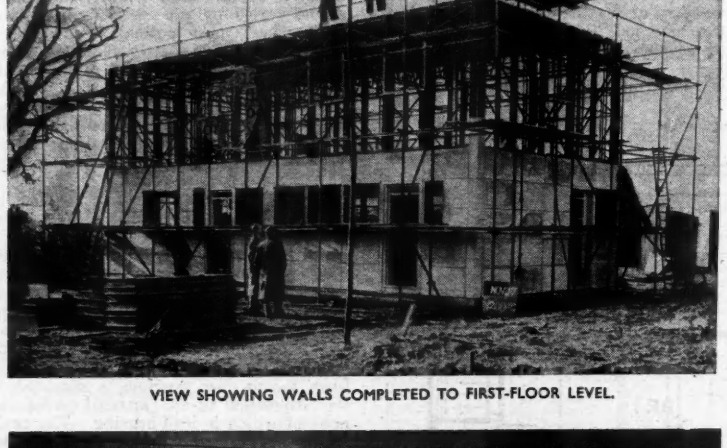
ABRIDGED SPECIFICATIONS.

Following are the abridged specifications; modifications are being and will be made as found necessary or expedient by this experimental work.

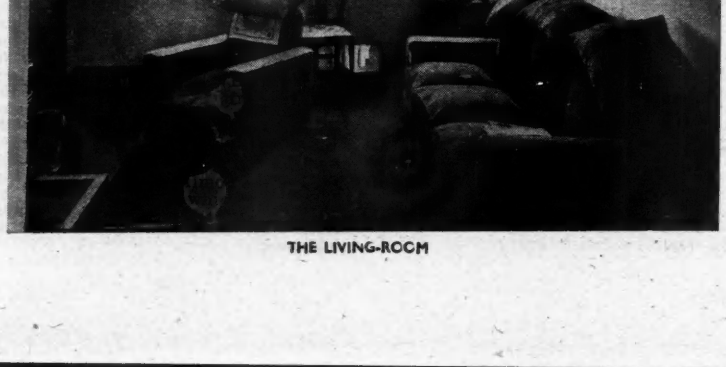
FOUNDATIONS of usual type.

STRUCTURAL FRAME is of ridge-welded rolled strip steel sections, factory assembled into interchangeable units for walls and joists. All units have been designed for lightness without sacrificing strength and stability. No unit weighs more than 100 lb., and the heaviest can be lifted easily by two men; no special lifting equipment is required and connection details have been kept simple. Provided the foundations are set level the frame automatically plumbs itself as soon as the joist bolts are tightened.

SHOWING STAIRCASE UNITS IN POSITION AND FLOORING UNITS LAID ON SLEEPER WALLS.



VIEW SHOWING WALLS COMPLETED TO FIRST-FLOOR LEVEL.



THE LIVING-ROOM

FACINGS are asbestos cement pans 4 ft. by 2 ft. filled in the factory with 2 in. wood-wool slabs. Flanges are formed which produce the necessary lap joints and provide facilities for caulking.

INTERNAL WALL AND CEILING LININGS.—These are of ¼ in. thick plasterboard, the paper facing of which is finished with paint or distemper.

WINDOW LININGS. — These are of pressed metal in one piece, stove-enamelled and finished in oil paint to match the room.

FLOORS.—These are 2½ in. thick, 4 ft. by 2 ft. "Escor" aerated concrete slabs laid on timber bearers spanned between the trusses to form the floors. Since suitable jointless flooring material is not available, these have been finished with a special damp-proof lino.

ROOFS.—These are constructed of concrete slabs similar to the floors and are then finished with three-ply "Ruberoid."

PARTY WALL.—This is formed from 2 in. laminated plasterboard in units 1 ft. 4 in. wide, with a core of wood-wool slabs, there being no physical connection between the two houses except at the extreme margin of the party wall—i.e., the outside section of the building and the roof slabs. The advantages of this construction are that it is soundproof, fire-resisting and of a dry construction, speedily erected.

EQUIPMENT.—The sinks, baths, stoves and electrical equipment have been obtained from such stocks as were available.

CUPBOARDS have been designed to replace partition units. The design enables the latter to be attached to the cupboards where they are needed.

HOT WATER SUPPLY.—This is by means of a boiler in the enclosed stove. A thermostatically controlled immersion heater is used for summer. The double cylinder arrangement gives compact and cheap hot and cold water storage in the dimensions of a standard cupboard.

SPACE HEATING. — Space heating is by means of a "Courtier" stove. This is attached to a 6 in. flue pipe, which is encased in a ventilated sheet metal duct, thus utilising the warmth of the flue for space. It should be noted that the construction enables flue pipes to be carried up with little difficulty wherever they may be necessary. Electric radiant panels are used for supplementary heating and are easily embodied in this construction.

The following firms have collaborated as sub-contractors in the production and/or erection of items for the Unibuilding development site at Coventry as sub-contractors: Asbestos cement, Cellactite and British Uralite Co., Ltd.; caulking compound, Chamberlin Weatherstrips, Ltd.; doors, Hitchins Flush Woodwork, Ltd.; doors and window frames, E. O. Shanks and Sons, Ltd.; ironmongery, W. N. Froy and Co., Ltd.; metal windows, Williams and Williams, Ltd.; architectural ironwork and glazing, Aygee, Ltd.; roofing, Ruberoid Co., Ltd.; aerated concrete, Escor Industries, Ltd.; interior paint and decoration, Hadfields (Merton), Ltd.; exterior treatment, W and J. Leigh, Ltd.; plumbing, B. Finch and Co., Ltd.; and site erectors, Mills Scaffold Co., Ltd. The site and builders' works were by Messrs. Garlicks, Ltd.

The electrical installation has had to be carried out largely with pre-war material and appliances, but so far as possible it illustrates the latest electrical ideas for the low cost post-war home.

The wiring consists of cable in screwed conduit tubing. Conduits were cut to length in advance of construction so as to reduce work on site. Special boxes were made for mounting the flush-fitting plug sockets in the prefabricated type of wall construction. For large numbers of houses the wiring installation would be still further developed to reduce cost and time of erection. To control the supply of electricity to each house a compact service unit is fitted in the broom cupboard in the utility room.

Lighting points are installed in the most suitable positions in the different rooms, special care being taken to provide effective illumination in the kitchen (where a second light is fixed over the sink) and over mirrors in the bathroom and bedrooms. Two-way switches are provided for the landing light and in downstairs rooms with more than one entrance.

In order to permit the convenient use of table lamps, vacuum cleaner, radio and other portable appliances, the number of which will undoubtedly increase as electricity comes to be used more and more during the life of the house, a minimum of three plug sockets are provided in every room. Electrically heated panels are provided in the dining-room and kitchen. In the latter the electric panel is built into the ceiling. In the dining-room the electric panels are the first of a new type in which heating wires are embedded in a sheet of plastic material. An electric immersion heater and thermostat are fitted in the hot water cylinder. The latter is heated by a boiler fitted in the back of the solid fuel fire when this is alight. At other times, or when supplies of hot water are required quickly, the immersion heater comes into action automatically under the control of the thermostat which ensures constant hot water without overheating or waste of current. Electric cooker and refrigerator are installed, as well as a washing machine of the cabinet type. A built-in aerial is fitted in the roof space, the downlead being connected to an aerial-earth plug in the living-room.

PREPARATION OF HOUSING SITES

SPECIFICATION FOR CONCRETE ROADS.

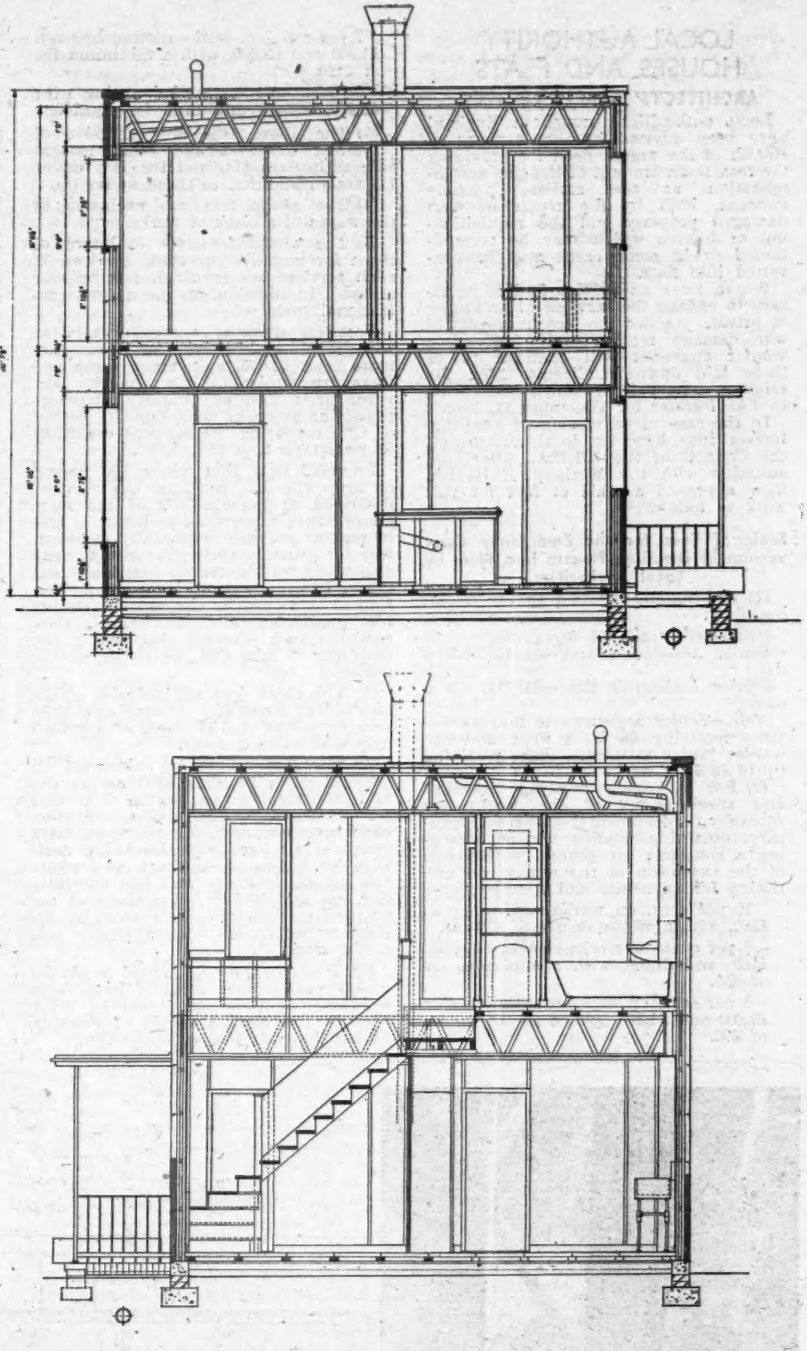
To enable the building of houses to start without delay when circumstances permit, the preparation of housing sites is to be put in hand this year. As a preliminary to this the Institution of Municipal and County Engineers, at the request of, and in consultation with, the Ministry of Health, has drawn up model specifications for concrete roads for this purpose.

There are two specifications, one being applicable where mechanical methods of compacting the concrete are used, and the other where the concrete is compacted by hand. They are being issued to local authorities by the Ministry of Health and are intended as a general guide to engineers charged with the supervision of site preparation, who will introduce such variations as local circumstances may necessitate.

The task of drafting the specifications was entrusted by the Roads and Bridges Committee of the Council of the Institution to a special committee consisting of Messrs. W. P. Robinson, County Engineer, Surrey; E. Minors, Borough Surveyor of Darlington; A. Floyd, County Surveyor of West Sussex; J. B. L. Thompson, Borough Engineer and Surveyor of Swindon; and D. G. Bevan, Deputy City Engineer and Surveyor of Birmingham.

The Eire Building Industry.

THE Eire Minister for Industry and Commerce has appointed a committee to advise him from time to time on matters affecting the building industry, particularly with reference to the planning and co-ordinating of post-war activities. The Advisory Committee consists of the following persons: John Ingram, B.E., B.Sc., A.R.C.S.I., chairman; S. Coughlan, D. Frame, senr., L. Crawford, Owen Hynes, V. Kelly, B.Arch., F.R.I.A.I., F.R.I.B.A., Senator T. Kennedy, H. F. McNally, A. B. MacNaughton, Nicholas O'Dwyer, B.E., M.I.C.E.I., C. M. O'Kelly, and W. M. Thompson.



Above: CROSS-SECTIONS.

Left: SHOWING METHOD OF JOINTING BY CAULKING COMPOUND UNDER PRESSURE

LOCAL AUTHORITY HOUSES AND FLATS

ARCHITECTS' SCALES OF FEES.

LOCAL authorities throughout England have been advised by the Ministry of Health of the urgent need for providing the maximum amount of housing accommodation at the earliest possible moment, both by the repair of war-damaged property and the requisitioning of houses which may be reconditioned or in some cases may be converted into flats.

Where local authorities find it necessary to engage the services of architects in private practice the fees in respect of war damage repairs and work of a similar character will continue to be those laid down in Circular 2720, the relative extract from which was given in *The Builder* for December 11, 1942.

In the case of conversion of dwelling-houses into flats for local authorities, the Council of the R.I.B.A., after consultation with the Ministry of Health, have approved a scale of fees for this work as follows:—

Scale of Fees for the Emergency Conversion of Dwelling-Houses into Flats by Local Authorities.

(1) For making detailed survey of the building:

Principal's time—£5 5s. a day,

Senior Assistant's time—£2 12s. 6d. a day.

Junior Assistant's time—£1 11s. 6d. a day.

Note.—Senior assistants to mean assistants receiving £6 6s. a week and upwards; junior assistants, those receiving up to £6 6s. a week.

(2) For preparing working drawings and specifications of the works (or equivalent document); where necessary, obtaining tenders and/or arranging a contract; for general supervision of the execution of the works and certifying for payments and completion:—

10 per cent. on works costing up to £500, with a minimum fee of £10 10s.

9 per cent. on works costing between £500 and £1,000, with a minimum fee of £50.

8 per cent. on works costing between £1,000 and £1,500, with a minimum fee of £90.

7 per cent. on works costing between £1,500 and £2,000, with a minimum fee of £120.

6 per cent. on works costing over £2,000, with a minimum fee of £140.

(3) The above fees are exclusive of travelling expenses and other reasonable disbursements, and the fees under (1) are in addition to those under (2).

(4) The above fees are exclusive of the wages of a clerk of works.

(5) The above fees are exclusive of those for quantity surveying services. If such services are required, fees will be allowed, in addition, on the normal professional scale.

Fees for quantity surveying services will be allowed where the works cost more than £1,000, and where these services are rendered by a quantity surveyor or a firm of quantity surveyors practising as such, not being the person or firm rendering the services described in paragraph 2 of the scale above.

Provided only that where the person or firm who has rendered the services described in paragraph 2 of the scale above in the capacity of architect, is also in regular practice as quantity surveyor, fees for quantity surveying services may also be allowed where the certificate that these latter services have been performed is signed by the person (stating his qualifications) who has actually rendered such services, and also by the principal or firm with which he is connected.

(6) The above fees are inclusive of the fees of any consultant or specialist engineer by whom the architect or surveyor may wish to be advised.

(7) The fees are to be calculated on the cost of the building work carried out to a property or properties for which one set of drawings and one specification have been prepared. In the event of a group of similar properties being dealt with by the same architect, and where one set of drawings and one specification are supplied for the whole of the properties, then the scale may be applied by reference to the aggregate cost of the work.

(8) The fees for abandoned work for which professional services have been rendered shall be calculated by reference to the R.I.B.A. Scale of Charges, Clause 2(e) (i), (ii), (iii) and (iv).

SMOKE FROM DOMESTIC FIRES

THE Minister of Health (MR. Henry Willink) recently received a deputation from the National Smoke Abatement Society and the Greater London Advisory Council for Smoke Abatement on the subject of coal smoke from domestic fires. Squadron-Leader E. H. Keeling, M.P., Chairman of the London Council, and Mr. Charles Gandy, Chairman of the Society, said that the crux of the problem was the living-room fire. The Government should specify and demonstrate efficient grates. Grates in which smokeless fuel would be burned or ordinary coal burned smokelessly should be made compulsory in all new housing. If an adequate supply of smokeless fuel was not at first available, ordinary coal could equally well be burnt in such grates. The need of adequate supplies of coke and other smokeless fuel dovetailed in with the urgent national interest that our coal reserves should be conserved, their economic use developed and the consumption of raw coal reduced. The possibilities of central heating and district heating should also be examined.

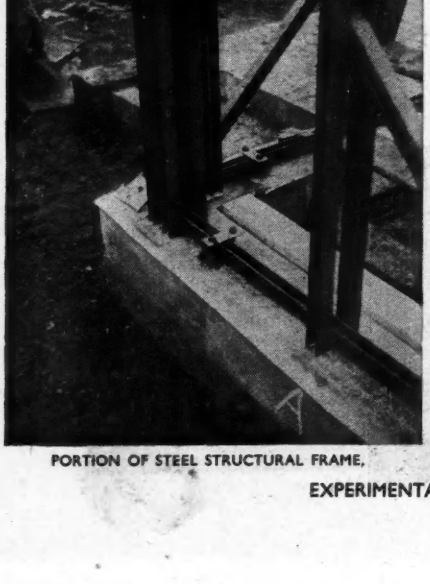
In reply, Mr. Willink said that the subject was one which was of very great importance from the point of view both of health and amenity. It was a question of practical ways and means of achieving this objective. He would welcome any specific suggestions from the Society and the Council.

Aberystwyth University College Buildings.

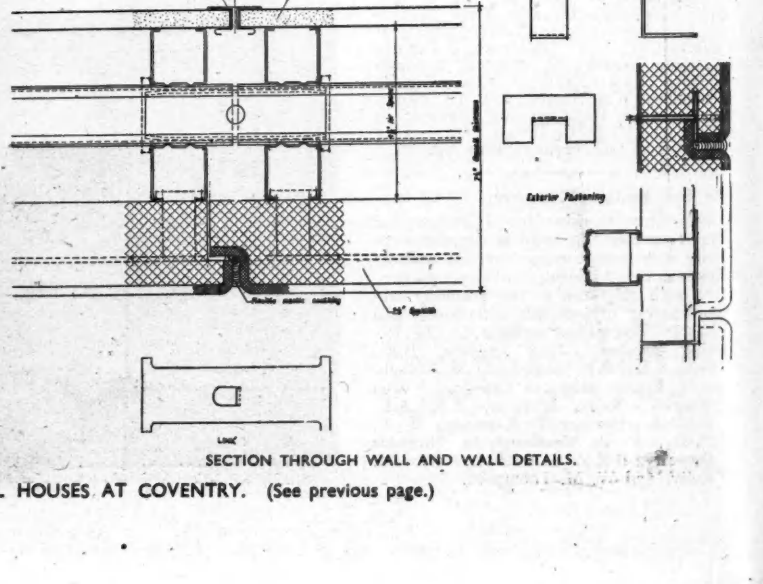
PLANS for the building of the new University College of Wales at Aberystwyth were mentioned at the annual meeting of the Old Students' Association, at Aberystwyth, when Vice-Principal T. Campbell James said the estimated cost was in the region of £900,000 and already £96,000 had been spent on the first part of the scheme. Mr. Percy Thomas, P.R.I.B.A., is the architect.

Minister of Labour to Address Builders.

MR. ERNEST BEVIN, M.P., Minister of Labour and National Service, is to be the guest of honour of the National Federation of Building Trades Employers at a luncheon following their half-yearly meeting in London on July 19.



PORTION OF STEEL STRUCTURAL FRAME.



SECTION THROUGH WALL AND WALL DETAILS.

EXPERIMENTAL HOUSES AT COVENTRY. (See previous page.)

THE TOWN PLANNING INSTITUTE

"PLANNING AND INDUSTRY: SOME OBSTACLES TO MOBILITY."

PROFESSOR SARGANT, FLORENCE, M.A., Ph.D., in a paper delivered to the Institute recently dealt with his subject under four heads:—

1. NATIONAL POLICY.—"It is admitted that the planning of housing and indeed of whole towns must depend on the location of industry. With the present slowing-down and the eventual fall in the total population of Britain, the growth of the population of any one area must depend on migration from other areas; and the direction and extent of migration will, in turn, depend largely on opportunities for industrial employment.

"If, as part of national policy, wider dispersion of the population is desired away from congested districts and also a wider diversity of industries in one-industry districts such as the Special Areas, then drastic changes must admittedly be made in the location of a number of industries. But, however desirable these changes may be, from the standpoint of the recommendations of the Barlow Commission or the Scott Committee changes in the location of plants in many industries are from the standpoint of practical economic feasibility difficult and costly. It is up to an economist to point out the difficulties not in order to obstruct planning, but to make sure that planning makes the most efficient use of the natural and human resources of the nation. Planning costly in material and personnel will eventually defeat itself.

2. PRACTICAL CHECKS TO FREEDOM OF LOCATION. THE "HEAVINESS" OF AN INDUSTRY.—"It is usual for planners to specify 'light' industries in developing any new area for industry and to leave it at that. The objection to a heavy industry seems to be partly based on its assumed unpleasantness in smell, noise, effluvia, smoke; partly on the assumption that a heavy industry is rooted by its transport costs to material deposits at places already prescribed by Nature. Neither of these assumptions is necessarily true, but before considering the question practically we must be more specific about the reference of 'heavy.' When it comes to selecting or rejecting specific building propositions from specific firms, tests of the lightness or heaviness of their industry must also be specific. Four such measurable tests have been put forward by Mr. Wilfred Smith in his study of Merseyside industries.

(a) Weight of material handled per man.
(b) Proportion of value of product formed by cost of materials.
(c) Weight of product per given value (i.e., its cheapness per ton).
(d) Proportion of men employed as against women.

To these possible indices I should add a fifth.

(e) Horse-power in use per operative, obtainable from the 1930 (though not the 1935) Census of Production.

"Some 55 industries were found for which all five indices were obtainable from the Census of Production. At the University of Birmingham, Dr. W. Baldamus and I, as part of an inquiry endowed by the National Institute of Economic and Social Research, have ranked these industries in order of their heaviness by each of the five tests. A composite ranking was also obtained by averaging the five series of ranks. Judging from the deviations of single-test ranking from the composite ranking we found test (b) the least representative; tests (a) and (e) the most representative.

"Though several industries were clearly heavy on all counts and others light on all counts, there were a great number of marginal cases where planners need more guidance as to the specific characteristics of the industry, and of the actual bearing of these characteristics on their location. At the University of Birmingham, largely in conjunction with the West Midland Group for Post-War Reconstruction and Planning we are working out an analysis of the specific location requirements of different industries. This analysis measures the present pattern of location by means of location quotients and coefficient of localisation, but demands also a rational interpretation of these statistical measures before allowing the status quo to stand. Mere inertia may determine present location, although a rational location based on modern technique may require quite a different pattern. Technical conditions, in turn, must be interpreted widely and should include the importance of personal contact as well as physical propinquity in the clustering of workshops in the same or in the linked industries of an industrial localisation, such as the textile industries of Lancashire, Yorkshire exhibit, or the metal industries of Birmingham."

3. PRACTICAL CHECKS TO FREEDOM OF LOCATION. THE ECONOMIC ADVANTAGES OF LOCALISATION.—"The clustering of many plants in the same or linked industries (continued the speaker) may be illustrated by charts representing the distribution of metal trades localised in the Birmingham telephone district. Charts showing the main characteristics of the Birmingham localisation showed that clearly few of the plants involved could easily be dispersed away from their complex of interdependent trades. It was only when a whole set of special trades was 'integrated' under one factory roof and thereby might secure 'internal' economies that a factory was free within limits to locate at will. But that integration led the planner out of the frying-pan into the fire. For if the Scott Committee's recommendations were to be followed, large plants (and integrated plants were usually large) must avoid a rural location. The dilemma was, in short, that small plants specialised in scope could not easily stand dispersion, while large plants should not be dispersed The solution of the difficulty is either to find industries with self-sufficient plants that are not too large, or to find industries with such light materials or product and requiring so little personal contact between their plants that, though specialised, they may be some distance apart."

4. CONCLUSIONS.—"To sum up. Industries need to be carefully selected if a policy of dispersion and of diversification is to be pursued successfully. Diversification may result in bringing more than one complex of industries into a town and making that town unduly large and congested. Dispersion of small plants may result in depriving the dispersed plant of the necessary personal contacts and the necessary services of specialist forms near by.

"These results can be avoided if an analysis is made of the characteristics of an industry and the industrial characteristics of a place before applying dispersion to the industry or diversification to the place. Such an analysis is being worked out for application to agricultural areas and a preliminary contribution will appear shortly in the Statistical Journal. The practical object in view must be to discover industries where new plants are more or less free of entanglements with other plants as to location, and (for dispersion in rural areas) free as to their economic size. 'Heaviness' is only one such possible cause of entanglement or factor in size of plants, and further inquiry should be made particularly into the circumstances determining the marked localisation of specific industries. In the last analysis mere heaviness may well prove of less import to planning than commonly feared, but the force of localisation is perhaps insufficiently appreciated."

R.I.B.A.

NOTES FROM COUNCIL MINUTES.

THE following notes are from the minutes of the R.I.B.A. council meeting of April 18:—

APPOINTMENTS.—*Public Relations Committee*—Lieut. R. Y. Goodden, R.N.V.R. (A.). *British Standards Institution: Reconstituted Building Divisional Council*—H. M. Fairweather (F.). *Building Industries National Council*—F. R. Hiorns (F.) in place of Mr. Basil M. Sullivan (F.) who has resigned on appointment as Chairman of the Board of Architectural Education.

NEW "RECOGNISED" SCHOOL.—The Council approved a recommendation by the Visiting Board that the Department of Architecture of the Southern College of Art, Portsmouth Centre (evacuated to the School of Art, Winchester) should be granted recognition of the three-years' course of exemption from the R.I.B.A. Intermediate Examination, subject to a further inspection when the school returns to Portsmouth.

WAR DAMAGE REPAIRS.—The Acting Secretary reported that in reply to representations made with regard to war damage repairs and payment of cost of works payments by instalments, the War Damage Commission had stated that consideration was being given to the best arrangements for ensuring that there should be adequate and timely finance for the work of repairing war-damaged properties when general reconstruction became possible.

ADVANCE PREPARATION OF HOUSING SITES.—It was reported that a deputation consisting of the President, Mr. L. Sylvester Sullivan (Chairman of the Practice Committee), Mr. C. H. James (chairman of the Housing Committee), Mr. A. W. Kenyon, Mr. Edwin Williams and Mr. C. D. Spragg (Acting Secretary) waited upon the Minister of Health and Sir John Wrigley, Joint Deputy Secretary, on March 22, and stressed the undesirability of the employment of architects, as suggested in Circular 14/44 regarding Advance Preparation of Housing Sites, for roads and sewers only without consideration of layouts. The Minister had stated that his intention was that layouts should in fact be prepared with houses shown in block form, and that he was anxious that architects should be employed to design the houses themselves when it was possible for local authorities to give detailed instructions. It was also appreciated that it was desirable that the private practitioner employed for the work should have the same opportunity as the official architect of seeing a scheme through to its conclusion. The Minister had added that he would urge local authorities to obtain competent technical advice in connection with all housing schemes.

GIFT OF DRAWINGS.—The thanks of the Council have been conveyed to Mrs. Henry Noel, grand-daughter of Charles Robert Cockerell, who has presented to the R.I.B.A. a group of drawings by Alfred Stevens and her grandfather of the sculpture at Lincoln and Wells Cathedrals, and has also lent, until further notice, the famous Charles Robert Cockerell drawing "A Tribute to the Memory of Sir Christopher Wren."

BIRMINGHAM AND FIVE COUNTIES A.A.—The Council formally approved the suspension of certain Rules of this Association enabling the President and Council to continue in office for the ensuing session.

REPLANNING OF AN ANCIENT CITY

MR. W. A. EDEN'S ADDRESS AT EXETER.

SPEAKING at the Town and Country Planning Association's conference on "Planning for Living" in the Guildhall, Exeter, on May 6, MR. W. A. EDEN, A.R.I.B.A., said:—

I like to think of a city as a society or companionship of men and of buildings. Of the society of men I do not wish to say very much at this stage, except to remind you of its variety, in that it is necessarily composed of male and female, old and young; of makers and users, sellers and buyers; of those who teach and direct, and those who learn and obey; all bound together in their manifold trades, occupations and disciplines, by mutual interest and a common rule or law. If we think of a building as being like a person—and we can find authority for doing so in the works of most of the great architectural theorists, from Vitruvius to Ruskin—it is easy to proceed a step farther and think of a city, in its architectural aspect, as a society of buildings as varied in character as the society of men for whom they are built. Here, too, we should wish to find old and young together; for a society in which the men or buildings were all old would be a dying society, whilst one in which they were all young would, patently, be immature. Similarly we should wish some of our dwellings to exhibit a masculine strength, and others a feminine grace, and it would be unavoidable that some should be in prominent and others in less prominent positions, the former commanding attention and the latter subordinate to them according to the rules of architecture. Finally, they would vary after their uses, as men vary after their various trades and professions.

The principle I have just hinted at is, of course, one that is well known to every shopkeeper, as well as to the board of directors of every bank, cinema and brewery company. They all know that if they want customers they must be in and not out of the way; and so you find their premises crowded together in places of public resort, at crossroads, near to railway stations, and on the highways between people's homes and places of business. The fact that such buildings are crowded together indicates also another principle well known to tradesmen—that the physical closeness of their places of business lends mutual support to their interests as traders.

One of the most important factors in the service of commercial and social interests is the width of a city's streets. The probability of Mrs. Smith's meeting Mrs. Brown in the course of their shopping depends upon the ease with which it is possible for them to recognise each other across the street, and to cross from one side to the other when they have done so. What is inconvenient to the meeting of Mrs. Smith and Mrs. Brown is also inconvenient to the shopkeeper, who likes his shop to face other shops at a companionable distance. It is a fact worthy of notice that few of the most successful shopping streets are wide streets.

As with shops, so also with people's houses. It used to be the unvarying custom in cities to build the houses adjoining one another in rows and terraces. In his Utopia, Sir Thomas More, interpreting Plato in the light of his own experience, commends this arrangement as the ideal. Nowadays we have abandoned the custom, ostensibly in the interests of health. However that may be, I would submit that the growth of the custom of building detached or semi-detached houses, and of laying out streets in residential districts far wider than is required by any rules of hygiene or of architecture, is slowly but surely destroying the society of our towns. Now I hope nobody will misunderstand me here. I should not dream of advocating an all-round return to mid-Victorian standards of town buildings. Twentieth-century housing has certainly, in some respects, shown an advance on that of our grandfathers in the nineteenth century, particularly in the importance we have attached to the provision of gardens, and the value of having grass and trees in our streets—but in the social virtue of neighbourliness I am afraid we have deteriorated sadly.

The point we should never forget about the modern traffic street is that, unlike the old shopping street, it is not, and cannot be, a place of society. Instead of uniting the buildings and districts on each side, it divides them, much as if it were a railway running on a high embankment. The space it occupies is lost to the life of the city, and for this reason it seems to me to be suicidal, in more senses than one, to attempt to drive such a street through the crowded city centre. Nor does it seem to me that what, until recently, has been the only alternative policy of constructing a wide by-pass for long-distance traffic has much more to commend it. People who travel long distances by road like to have their journey punctuated by the sight of the insides of towns where they may sometimes even stop to have a meal. A reasonable method of overcoming the difficulty is suggested by the dividing character of the road. It is becoming widely recognised that large cities need to be divided into smaller units for social reasons, and this social division can be much more effective if there exists some visible symbol of the division. What better symbol, then, could we have than the main traffic highways, distinguished from the other streets by their great width, together with appropriate forms of tree-planting? By those the city could be divided into what we are learning to call "precincts."

One such precinct should certainly be the central business district, which in an ancient city generally contains most of the buildings of historic interest. In a city like York, where the walls remain intact, its limits are fairly easy to determine. A central ring road can follow the line of the walls on the outer side, and from this the main routes out of the city can radiate like the spokes of a wheel, separating the outer precincts from one another. We then have a scheme according to which the city itself becomes like a family of precincts grouped round the ancient head, or centre, to which the greatest honour is due. It is coming to be generally thought that each member of this family should as far as possible be self-supporting, with its own shops, schools, amusements and what are officially known as community centres. I have no time to describe the individual features of each member, and indeed, I do not think that it is desirable that I should do so. For although what concerns the whole family should be planned by the family as a whole, what is particular to each member should be the responsibility of that member. In this we cannot do better than to follow Sir Thomas More's King Utopus, who "himselfe, even at the first beginning appointed, and drew furth the platte fourme of the citie into this fashion and figure that it hath nowe, but the gallant garnishinge, and the beautiful settinge furth of it, whereunto he saide that one mannes age would not suffice: that he left to his posteritie."

CREWDSON
BUILDING
&
CIVIL ENGINEERING
CONTRACTORS
PLANT for HIRE
HORLEY · SURREY
HORLEY 208

OBITUARY

C. H. Biddulph-Pinchard, F.R.I.B.A.

The death has taken place of Mr. Charles Henry Biddulph-Pinchard, F.R.I.B.A., at the age of 68. Articled to Messrs. King and Lister, of Plymouth, Mr. Biddulph-Pinchard completed his architectural education at the A.A. Schools before becoming assistant to Louis Ambler, after which he set up in practice on his own account. He was principally interested in the domestic field, and designed large schemes of alteration or restoration at Upham House, Aldbourne; Stragglethorpe Old Hall, Newark; "Coldbrook," Abergavenny; and Biggin Hall, Oundle; besides new houses at Fulmer Grange, Slough; Satwells Barton, Henley-on-Thames; the Witchert House and West Witherage, Penn, Bucks; Eydon Hall, Northants; Merrifield, Wells; Compton Castle, Somerset; and many others. He restored the church and part of the Manor House at Great Chaldfield, Wilts, Wellington School, Somerset, and the reredos, St. Mark's Church, Bromley. He also designed the London Clinic in the Marylebone-road.

William J. W. Todd, A.R.S.A., F.R.I.B.A.

The death occurred on April 29, at the age of 60, of Mr. William James Walker Todd, senior partner of Dick, Peddie, Todd and Jamieson, architects, Edinburgh. Mr. Todd was the architect for Merchiston Castle School, Colinton; the East Lothian County Buildings, Haddington; Peebles-shire County Buildings; and the West Lothian County Buildings, Linlithgow. He was president of the Edinburgh Architectural Association from 1936 to 1938, and an Associate of the Royal Scottish Academy.

Joseph Forster, F.R.I.B.A.

The death has occurred at Lockerbie, Cumberland, of Mr. Joseph Forster, former County Architect with Cumberland County Council. Mr. Forster was appointed in 1919 and retired in 1937.

A. E. Reveirs-Hopkins.

We regret to record the death, on May 8, of Mr. Alfred Edward Reveirs-Hopkins, an art critic and antiquary of distinction. Mr. Reveirs-Hopkins was for many years a valued contributor to *The Builder* and to *Architecture*.

George Parlby.

Mr. George Parlby, artist in stained glass, has died at his Chiswick studio at the age of 88. His work may be seen in cathedrals and churches, including Selby Abbey and St. Margaret's, Westminster. He was one of the oldest members of the Savage Club, and a Past Master of the Art Workers' Guild. Several of his designs are on view at the current R.A. Exhibition.

T. H. Bannister.

We regret to record the death of Mr. Thomas Henry Bannister, a director of Messrs. Thomas & Wilson, Ltd., plastering contractors, of Fulham-road, S.W.6.

CHEAPER HOUSE BUILDING

COMPETITION FROM PREFABRICATION.

CHEAPER house-building after the war, due to the abolition of the Essential Work Order and other Government controls, the return of younger men from the Forces, and competition between prefabrication and traditional building, was forecast by Mr. H. C. Harland, President of the London Master Builders' Association at Edinburgh Rotary Club on Thursday.

After the war [said MR. HARLAND] the Essential Work Order must go and unnecessary control of materials disappear if we are to have cheaper houses. On the return of younger men from the Forces the hourly output will increase. With the disappearance of Government interference between employers and employed there will be increased confidence, which will result in a greater will to work for the ultimate benefit of all who require housing. A spirit of competition between prefabricators, who threaten to build houses quicker and more cheaply, and the builders of real houses with great experience behind them, will result in stepping up production and thus reducing costs.

As to wages, they may go up or down, but there must be some relation between output and the hourly rate of pay. Any agreement for a bonus on output is not a matter for Government arrangement, but for mutual agreement between the members of the team working together to produce what all men need, namely, homes, and I am confident that with the disappearance of the present spirit of profligacy which the war has produced we may expect costs to be standardised at some 50 per cent. above the pre-war level, which would result in the £500 house costing somewhere about £750.

As to the post-war house, much has been said and written about prefabrication. Everything in the ordinary house is already prefabricated, even the common walling materials to which we have become so accustomed.

I have seen a Portal steel house, and I am sure it will meet a great need, especially in housing people on the Continent of Europe, and it will have to be put up with by many requiring houses in this country. Externally, it is more or less a tin box—or, shall I say, a motor body minus wheels, but internally it looks quite good, and it will be "home" to many who await the real houses which everyone will want, but which simply cannot be produced.

Steel houses should be produced quickly in factories switching over from war production of light steel construction, and as a temporary measure will be hailed as "a boon and a blessing to men."

There are other forms of so-called prefabricated buildings, and my own feeling is that, where these forms of construction compare reasonably in cost with normal construction, do not employ building trade labour which will be required on permanent construction, and can be erected on the site with considerable saving in manhours, the country will have to accept them as a temporary measure to give us houses and more houses against the millions that will be required.

No one wants these temporary prefabricated articles which will never fit comfortably into our countryside or our new town-planned housing schemes, but it will be a case of Hobson's choice, and for this reason we will accept them as being inevitable.

As to permanent construction, there will be many varieties of concrete construction for walls to overcome shortage of stone and masons and of bricks and bricklayers. But these permanent alternative methods will go on side by side with stone and brick-built houses employing craftsmen, and will be camouflaged by rough-cast and cement render, so that they will fit into any scheme. All these are tried and tested forms of construction. Let us see to it that all these houses are architectural in appearance, are spacious internally, and have all necessary plain fittings economically possible, so that those occupying them can afford the rents and enjoy their comforts and amenities.

REGISTERED HOUSE BUILDERS

THE FEDERATION'S VIEWS ON RECONSTRUCTION.

THE National Federation of Registered House Builders has performed a useful service by publishing a memorandum on "Housing After the War"—the conjoint results of the deliberations of six sub-committees which have considered the subject of post-war housing from various aspects. The memorandum is to be taken as an expression of the considered opinions of the industry, and will be used as a basis of any representations that may be made to the Government on behalf of the Federation which, it was stated at a meeting on Tuesday, comprises housebuilders who have erected 85 per cent. of private enterprise house construction. The memorandum owes much to Mr. C. Douglas Calverley, who has done much during the four-and-a-half years of his presidency to place the National Federation of Registered House Builders in the prominent position it holds to-day as the body composed of builders who are willing to build to an established specification and to submit their products to inspection during construction and to certification. It is good to know that the Federation and the building societies are working closely together in this essential matter of protecting the house purchaser against shoddy work.

KING

1 King-Alloy Rolled Steel Section.
2 Domed Top Sheds All Moisture.
3 Correct Trolley Clearance.
4 Anti-Rust Finish.
5 Flat Running Treads For Long Life.
6 Lateral Movement For Easy Running.
7 Tecalemit Pressure Lubrication.

IF YOUR DOORS ARE FITTED WITH
KING DOOR TRACK
THEY ARE ALWAYS RUNNING IN
TIP TOP GEAR
GEO. W. KING LTD
HARTFORD WORKS HITCHIN HERTS
PHONE HITCHIN 960 (10 LINES)

The Memorandum Summarised.

1. The building industry has a proud record of service which augurs well for the contribution which it can make towards the speedy and economic provision of well-designed and soundly constructed houses in the post-war years.

2. Private enterprise is better equipped to-day than it was after the last war to recommence house-building in a big way; whenever the crippling restrictions of war time are removed its immediate contribution may reasonably be expected to exceed that of local authorities.

3. Improved standards of construction can be assured by the machinery of the National House-Builders Registration Council.

4. Sub-standard housing, if temporarily found to be necessary, should be licensed for a definitely limited period of years.

5. Architectural collaboration should ensure improved design and assist towards a better public appreciation of good design.

6. Preliminary procedure necessary to obtain authority before building is in drastic need of simplification and speeding up.

7. Specifications for private street works and drainage should be simplified and standardised.

8. Labour is likely to be the bottle-neck in supply; early demobilisation of key men is advocated.

9. Wages providing inducement and community of interests between employers and workmen are desirable, and no difficulty is anticipated in agreeing suitable arrangements with the operatives.

10. All unnecessary control over production and distribution of materials should be removed as early as possible; possible exploitation by price-rings can be combated by an Inter-Departmental Committee reporting publicly.

11. Steps should be taken to ensure an adequate supply of timber at £15 per standard, f.o.r. British ports.

12. Home-ownership is sound in principle and should be encouraged.

13. Freehold tenure with present user licensed for a definite period is preferable to leasehold tenure.

14. If the Government is determined to operate a scheme based on the Uthwatt Report, it should first be tried experimentally in a suitably sized region.

15. Land acquired by local authorities for housing should, in certain circumstances, be made available for development by private enterprise.

16. Building costs can be brought down within a reasonably short time to about 34½ per cent. above pre-war costs; given certain conditions houses can be built to rent at figures comparable with those charged for similar accommodation before the war.

17. There have been considerable developments in building technique: private enterprise will take full advantage of these.

18. Cheap money coupled with extended periods of repayment can do much to enable houses to be built for the lower income groups.

19. The Housing (Financial Provisions) Act, 1933, should be made compulsory on local authorities instead of permissive as at present.

20. There should be equality of treatment as between local authorities and private enterprise in the matter of subsidies and/or financial assistance.

21. Government guarantee of long-term loans would be preferable to subsidies, would be less costly and equally effective.

22. Private enterprise should be given an opportunity to re-develop bombed areas in towns and cities.

23. Urban re-development might be facilitated by freeing the developer from the obligation to find alternative accommodation for dispossessed tenants of sub-standard houses.

24. The time is ripe for review of the Rent Restriction Acts.

25. An active building industry is the spearhead of general industrial prosperity.

LAW REPORTS

QUESTIONS OF LAW UNDER THE DRAINAGE ACT, 1930.

KING'S BENCH DIVISIONAL COURT.
Before JUSTICES HUMPHREYS, OLIVER, and STABLE.

Port of London Authority v. The Essex Rivers Catchment Board.

THIS case came before the Court upon a special case stated for the opinion of the High Court upon questions of law raised under the Drainage Act, 1930. The material facts were these :—

The appellants, the Port of London Authority, owned certain premises liable to pay drainage rates under the Drainage Act, 1930. In 1937 the Essex Rivers Catchment Board determined what the annual value of the premises was for the purposes of the drainage rates, but before the order was made for the payment of those rates for the year beginning April 1, 1943, the Port of London Authority became of opinion that the annual value of the premises for the purpose of the rates was less than that decided in 1939, when the value was redetermined owing to a small part of the premises being taken out of the list, and appellants asked that a fresh determination should be made for the year commencing April 1, 1943. This the Catchment Board refused to do, and made the same rates. The appellants then gave notice of appeal to Quarter Sessions, but after that both parties agreed to and obtained leave for the stating of a special case, which now came before the Court for argument on the two questions raised, viz.: (1) Whether the respondent Board were in law bound to make, in the circumstances, a fresh annual value of the premises and to serve notice of their decision on the appellant authority before making the rates for the year beginning April 1, 1943; and (2) whether the rates already made were bad in law?

The Court decided both questions in favour of the appellants, viz.: in the affirmative, and accordingly gave judgment for them with costs.

Mr. F. Wishart appeared for the appellants, and Mr. H. B. Williams for the respondents.

A RATING APPEAL: BUILDERS' YARDS HELD TO CONSTITUTE WORKSHOPS.

ESSEX RATING APPEALS COMMITTEE.
MR. MAURICE FITZGERALD, K.C., President.

A ruling of considerable importance to the building trade was made by the Essex Rating Appeals Committee at Chelmsford recently, when a decision of the Romford Borough Rating Authority and the South Essex Assessment Committee (jointly) to assess the premises of three firms as non-industrial was successfully resisted. Appellants were Messrs. Banyard, Bros., Messrs. Warriner (Builders), Ltd., and Mr. Richard F. King—all of Romford.

Mr. J. C. Llewellyn, counsel for appellants, said Banyard Bros. were builders and contractors carrying on business in premises which had previously been recognised as industrial hereditaments, but at the last meeting of the assessing authorities the proposal was made that they were no longer used as a factory or workshop, and that was what the appellants appealed against. The question for the Court was whether or not the primary purposes for which the premises were used were those of a workshop. He (Mr. Llewellyn) contended that these premises clearly came within the definition of workshop, which the Factory Acts laid down as a place or premises where manual labour was exercised in making or repairing articles of an industrial nature.

Edwin H. Banyard, a member of the firm, described the premises as consisting of two sheds, one normally used as a timber rack, a brick and slate office building, plumbers', glaziers' and joinery shops, a lime store, and a concrete covered way used for painting and drying joinery work. A number of his 18 employees spent 80 per cent. of their time there, working chiefly on air-raid repair work to damaged doors, windows and black-out screens.

Answering Mr. Percy Lamb, counsel for respondents, witness agreed it happened sometimes that few of the workpeople were on the premises—sometimes, for instance, the local authority called them out for urgent building repair work.

Mr. Percy Lamb: I suggest the premises were merely used as a place where tools or other materials were kept by the workpeople.

Mr. Banyard: The premises were used for the purposes of a builders' business, and no one can say anything else.

Mr. Harold Wand, valuation officer to the Romford Council, said in June, 1943, he reviewed Messrs. Banyard's premises, and, after two visits, decided they were non-industrial and classified them as such. They seemed to him to be the headquarters of a firm engaged on outside operations and used for the storage of their stock-in-trade. "My experience of small builders' yards is that they are primarily used for storing tools and odds and ends, and the bulk of the work is done on the customer's own sites," he added.

The Chairman, after a short consultation with his colleagues, announced that the committee had agreed that Messrs. Banyard's premises constituted a workshop. Respondents had not satisfied them that the premises were used for any other primary purpose, and the appeal would be allowed with costs.

Mr. Percy Lamb intimated that he could not contest the appeal of Messrs. Warriner, and after the third appellant had given evidence, also agreed to Mr. King's appeal being allowed, both with costs.

Lighting Reconstruction Pamphlets.

The first three of a series of "Lighting Reconstruction Pamphlets" have now been issued by the Illuminating Engineering Society, dealing respectively with "Principles of Good Lighting," "The Lighting of Public Buildings" and "The Lighting of Schools." Others are in preparation. All these pamphlets are obtainable, price 1s. each, from 32, Victoria-street, London, S.W.1.

FOR POST-WAR WORK—
ESTIMATING
FOR
BUILDINGS AND PUBLIC WORKS
10th Edition (1943)
BY
B. PRICE DAVIES, F.S.I., F.R.I.B.A.
(Four times Gold Medallist for Authorship)
Revised, Extended and Up-to-date.
For Estimating, Works Programmes, and Ordering Materials.
Price 30/- Post Free.
Specification for Houses.
3rd Edition, 1938, with 137 diagrams.
Price 5/6 Post Free.
Designing Houses with Economy and Effect.
Prize Papers, 1937.
Price 5/6 Post Free.
THE BUILDING ESTIMATOR PUBLICATIONS,
Western Mail Buildings, St. Mary Street, CARDIFF.

IN PARLIAMENT

The New Steel Houses.

LIEUT.-COMMANDER JOYNSON-HICKS asked the Parliamentary Secretary to the Ministry of Works how factory-built steel houses were to be adapted to meet the urgent needs of rural centres of population where neither electricity, gas nor piped water supplies were available.

MR. HICKS said that the Minister had indicated if the prototype of the emergency factory-made house was approved the Health Ministers would allocate them to the various localities for which they were suitable. The house was not intended for use in the circumstances described in this question.

MR. LAWSON asked the Parliamentary Secretary to the Ministry of Works if he would erect a small number of prefabricated steel houses in various parts of the country for immediate occupation so that the opinions of the occupants might be sampled before mass production starts.

MR. HICKS said that the prototype had to be constructed by hand and it would therefore not be possible to arrange for the erection of a number in various parts of the country for occupation before production started.

Barlow, Scott and Uthwatt Reports.

MR. MANDER asked the Minister of Town and Country Planning whether he could now state the decisions of the Government with regard to the Barlow, Scott and Uthwatt Reports; and when any legislation or White Papers might be expected on any of the questions involved.

MR. W. S. MORRISON said he had nothing at present to add to his answer of March 30 last.

MR. MANDER asked when did the Minister think he would be in a position to give a decision on this matter? Was it true that all efforts to secure agreement on Uthwatt had failed?

MR. MORRISON: It is not true to say that all efforts to secure agreement have failed. The question deals with three reports. I stated the Government's view on the Scott Report on March 30 last.

MR. SHINWELL: Is it not true to say that the Government have not the slightest intention of implementing the recommendations of the Uthwatt Report; and would it not be only fair to the country to say so?

MR. MORRISON: No, sir; it would be neither fair nor true.

LT.-COL. DOWER: When is the legislation promised a year or two ago to enable local authorities to purchase bombed sites likely to be introduced?

MR. MORRISON: I hope that the Bill will be before the House very shortly.

Farm Buildings.

MR. DE LA BERE asked the Minister of Agriculture whether, in view of his request to the farmers throughout the country for a greater measure of efficiency, he could now make some statement as to the Government's policy both for the repairs to farm buildings and the erection of new ones at the conclusion of hostilities; and if it was the Government's intention to set up a centralised body for the supply of farm implements and machinery.

MR. R. S. HUDSON said that both these matters would be considered in connection with Government policy during the period after the end of hostilities.

Model Building By-laws.

In reply to MR. LAWSON, MR. WILLINK said that revised model building by-laws were issued just before the war for use under the Public Health Act, 1936. New by-laws under that Act were already in force practically everywhere apart from London and some half-dozen provincial towns where the position was governed by special Acts. He fully appreciated the need for securing that by-laws kept pace with modern methods of construction, and he would take steps when necessary to issue revised model by-laws from time to time.

RATES OF WAGES IN THE BUILDING TRADE

AS AND FROM 2nd APRIL, 1943

[Every endeavour is made to ensure accuracy, but we cannot be responsible for errors]

	Crafts-men.	Lab-ourers.
Aberavon	2/0	1/7
Aberdare	2/0	1/7
Abergavenny	2/0	1/7
Abingdon	1/10½	1/5½
Accrington	2/0	1/7
Aldeburgh	1/8½	1/4½
Aldershot	1/10½	1/5½
Alfreton U.D.	2/0	1/7
Alnwick	1/11½	1/6½
Altrincham	2/0	1/7
Amble	1/11½	1/6½
Amersham	1/10½	1/5½
Ammanford	2/0	1/7
Andover	1/10	1/5½
Ardingly	1/10	1/5½
Arundel	1/10	1/5½
Ascot	1/10	1/5½
Ashby-de-la-Zouch U.D.	2/0	1/7
Ashford (Kent)	1/10	1/5½
Ashford (Middlesex)	2/0	1/7
Ashington	1/11½	1/6½
Ashtead	2/0	1/7
Ashton-under-Lyne	2/0	1/7
Aylesbury	1/10	1/5½
Aylsham	1/9	1/4½
Bagshot	1/10	1/5½
Banbury	1/10	1/5½
Barnsley	2/0	1/7
Barnstaple	1/10	1/5½
Barrow-in-Furness	2/0	1/7
Barry	2/0	1/7
Basingstoke	1/10	1/5½
Bath	1/11½	1/6½
Batley	2/0	1/7
Beaconsfield	1/10½	1/5½
Beccles	1/8½	1/4½
Bedford	1/11½	1/6½
Berkhamsted	1/10	1/5½
Berwick	1/11½	1/6½
Beverley	2/0	1/7
Bexhill	1/10½	1/5½
Bideford	1/10	1/5½
Biggleswade	1/10	1/5½
Billericay	1/9½	1/5
Birchington	1/10	1/5½
Birkenhead	‡£2/1	¶
Birmingham C.B.	†2/0	†1/7
Bishop Auckland	2/0	1/7
Bishop's Stortford	1/11	1/6½
Blackburn	2/0	1/7
Blackpool	2/0	1/7
Blyth	2/0	1/7
Bognor Regis	1/10	1/5½
Bolton	2/0	1/7
Bournemouth	1/11	1/6½
Bracknell	1/10	1/5½
Bradford	2/0	1/7
Bradford-on-Avon	1/9	1/4½
Braintree	1/10	1/5½
Brentwood	1/11½	1/6½
Bridgwater	1/10½	1/5½
Bridlington	1/11½	1/6½
Brighouse	2/0	1/7
Brighton	1/11	1/6½
Bristol	2/0	1/7
Broadstairs	1/10	1/5½
Bromsgrove U.D.	1/11½	1/6½
Buckley	2/0	1/7
Bungay	1/8	1/4
Burnham-on-Crouch	1/8½	1/4½
Burnley	2/0	1/7
Burslem	2/0	1/7
Burton-on-Trent C.B.	2/0	1/7
Bury	2/0	1/7
Bury St. Edmunds	1/9½	1/5
Buxton	1/11½	1/6½
Byfleet	1/10½	1/5½
Cambridge	2/0	1/7
Canterbury	1/10	1/5½
Cardiff	2/0	1/7
Carlisle	2/0	1/7
Carnforth	2/0	1/7
Castleford	2/0	1/7
Caterham	2/0	1/7
Chard	1/9	1/4½
Chatham	1/11	1/6½
Chelmsford	1/11½	1/6½
Cheltenham	1/11	1/6½
Chepstow	1/11½	1/6½
Chertsey	1/11	1/6½
Chester	2/0	1/7
Chesterfield M.B.	2/0	1/7
Chichester	1/10	1/5½
Chorley	2/0	1/7
Cirencester	1/9½	1/5
Clacton	1/10	1/5½
Cleveleys	2/0	1/7
Clitheroe	2/0	1/7
Cobham (Surrey)	1/11	1/6½
Colchester	1/11½	1/6½
Colwyn Bay	1/11	1/6½
Congleton	1/11½	1/6½
Coventry C.B.	2/0	1/7
Cranbrook	1/10	1/5½
Cranleigh	1/10	1/5½
Crawley	1/10	1/5½
Crewe	1/11½	1/6½
Cromer	1/9	1/4½
Crowborough	1/10	1/5½
Cuckfield	1/10	1/5½
Darlington	2/0	1/7
Darwen	2/0	1/7
Daventry M.B.	1/10½	1/5½
Deal	1/10	1/5½
Denbigh Town	1/11	1/6½
Derby C.B.	2/0	1/7
Devizes	1/9	1/4½
Dewsbury	2/0	1/7
Didcot	1/10	1/5½
Diss	1/8½	1/4½
Doncaster	2/0	1/7
Dorchester	1/9½	1/5
Dorking	1/10½	1/5½
Dover	1/10	1/5½
Dovercourt	1/10	1/5½
Driffield	1/10½	1/5½
Droitwich M.B.	1/11½	1/6½
Dudley M.B.	2/0	1/7
Dunstable	1/10½	1/5½
Durham City	2/0	1/7
Eastbourne	1/11	1/6½
E. Glam. (Mon. Val.)	2/0	1/7
East Grinstead	1/10	1/5½
Edenbridge	1/10	1/5½
Ely	1/9	1/4½
Epping	2/0	1/7
Exeter	1/11½	1/6½
Exmouth	1/10½	1/5½
Fakenham	1/9	1/4½
Falmouth	1/10½	1/5½
Fareham	1/11	1/6½
Faversham	1/10	1/5½
Felixstowe	1/11	1/6½
Filey	1/10½	1/5½
Fleetwood	2/0	1/7
Flint	2/0	1/7
Folkestone	1/10	1/5½
Frinton-on-Sea	1/10	1/5½
Frome	1/9	1/4½
Gainsborough U.D.	1/11	1/6½
Gateshead	2/0	1/7
Gillingham (Kent)	1/11	1/6½
Glossop	2/0	1/7
Gloucester	1/11½	1/6½
Godalming	1/10	1/5½
Goole	2/0	1/7
Gosport	1/11½	1/6½
Grantham M.B.	1/11	1/6½
Gravesend	1/11½	1/6½
Great Yarmouth	1/10	1/5½
Grimsby	2/0	1/7
Guildford	1/10	1/5½
Guilsborough	1/10½	1/5½
Halifax	2/0	1/7
Hanley	2/0	1/7
Harpenden	1/11	1/6½
Harrogate	2/0	1/7
Hartlepools	2/0	1/7
Harwich	1/10	1/5½
Haslemere	1/10	1/5½
Hastings	1/10	1/5½
Hatfield	1/11½	1/6½
Haywards Heath	1/10	1/5½
Hednesford	1/11½	1/6½
Hemel Hempstead	1/11	1/6½
Henley-on-Thames	1/10	1/5½
Hereford	1/10	1/5½
Herne Bay	1/10	1/5½
Hertford	1/11½	1/6½
Heysham	2/0	1/7
Hitchin	1/11	1/6½
Hoddesdon	1/11½	1/6½
Holt (Norfolk)	1/8½	1/4½
Horley	1/10	1/5½
Horsham	1/10	1/5½
Horwich	2/0	1/7
Huddersfield	2/0	1/7
Hull	2/0	1/7
Hunstanton	1/9	1/4½
Huntingdon	1/9½	1/5
Ilfracombe	1/10	1/5½
Ingatestone	1/10½	1/5½
Ipswich	1/11½	1/6½
Isle of Thanet	1/10	1/5½
Isle of Wight	1/9½	1/5
Keighley	2/0	1/7
Kenilworth	2/0	1/7
Kettering M.B.	2/0	1/7
Kidderminster M.B.	1/11½	1/6½
King's Lynn	1/10	1/5½
Kirkham	2/0	1/7
Knowle	1/11½	1/6½
Lancaster	2/0	1/7
Leamington M.B.	2/0	1/7
Leatherhead	1/11	1/6½
Leeds	2/0	1/7
Leicester C.B.	2/0	1/7
Leighton Buzzard	1/9	1/4½
Letchworth	1/11	1/6½
Lewes	1/10	1/5½
Lichfield M.B.	1/11	1/6½
Lincoln C.B.	2/0	1/7
Littlehampton	1/10	1/5½
Liverpool	‡£2/1	¶
Llandudno	1/11	1/6½
Llanelly	2/0	1/7
London—		
12m. radius	2/1½	1/8
12-15m. radius	2/1	1/7½
Long Eaton U.D.	2/0	1/7
Longton	2/0	1/7
Loughborough M.B.	1/10½	1/5½
Louth M.B.	1/10	1/5½
Lowestoft	1/11½	1/6½
Luton	1/11½	1/6½
Macclesfield	1/11	1/6½
Maidenhead	1/10½	1/5½
Maidstone	1/10½	1/5½
Malvern U.D.	2/0	1/7
Manchester	1/9	1/4½
Manningtree	2/0	1/7
Mansfield M.B.	1/9	1/4½
March	1/11	1/6½
Margate	1/10	1/5½
Market Harborough	1/11	1/6½
Matlock U.D.	1/10½	1/5½
Melton Constable	1/8½	1/4½
Melton Mowbray	1/11	1/6½
Merthyr	2/0	1/7
Middlesbrough	2/0	1/7
Middleton	2/0	1/7
Middlewich	1/11½	1/6½
Milford Haven	1/10½	1/5½
Morecambe	2/0	1/7
Morley	2/0	1/7
Mundesley	1/9	1/4½
Nantwich	1/11½	1/6½
Nelson	2/0	1/7
Newark-on-Trent	1/11½	1/6½
Newbury	1/10	1/5½
Newcastle-on-Tyne	2/0	1/7
Newcastle-u.-Lyme	2/0	1/7
New Forest	1/10	1/5½
Newmarket	1/10	1/5½
Newport, Mon.	2/0	1/7
Newport Pagnell	1/10	1/5½
Northampton C.B.	2/0	1/7
Norwich	2/0	1/7
Nottingham	2/0	1/7
Nuneaton	2/0	1/7
Oakham U.D.	1/10½	1/5½
Oldham	2/0	1/7
Ormskirk	2/0	1/7
Oxford	1/11½	1/6½
Oxted	1/10½	1/5½
Paignton	1/11½	1/6½
Peterborough (Borough)	1/11½	1/6½
Plymouth	2/0	1/7
Pontefract	2/0	1/7
Pontypridd	2/0	1/7
Port Talbot	2/0	1/7
Portsmouth	1/11½	1/6½
Preston	2/0	1/7
Pulborough	1/10	1/5½
Ramsgate	1/10	1/5½
Reading	1/11½	1/6½
Redditch U.D.	1/11½	1/6½
Redhill	1/10½	1/5½
Ripon	1/10½	1/5½
Rochdale	2/0	1/7
Rochester	1/11	1/6½
Rugby M.B.	2/0	1/7
St. Albans	1/11½	1/6½
St. Helens	2/0	1/7
St. Neots	1/9½	1/5
Saffron Walden	1/9	1/4½
Salisbury City	1/9½	1/5
Salisbury Plain	1/11	1/6½
Sawbridgeworth	1/10½	1/5½
Saxmundham	1/8½	1/4½
Scarborough	1/11½	1/6½
Scunthorpe	2/0	1/7
Selby	2/0	1/7
Sevenoaks	1/10½	1/5½
Sheerness	1/10	1/5½
Sheffield	2/0	1/7
Shipley	2/0	1/7
Shoeburyness	1/11½	1/6½
Shoreham	1/11	1/6½
Shrewsbury M.B.	1/11½	1/6½
Sittingbourne	1/10	1/5½
Skegness U.D.	1/11	1/6½
Sleaford U.D.	1/10½	1/5½
Slough	1/11	1/6½
Smethwick	†2/0	†1/7
Southampton	1/11½	1/6½
Southend-on-Sea	1/11½	1/6½
Southport	2/0	1/7
South Shields	2/0	1/7
Spalding	1/10	1/5½
Stafford M.B.	1/11½	1/6½
Staines	1/11	1/6½
Stamford M.B.	1/11	1/6½
Stevenage	1/11	1/6½
Stockport	2/0	1/7
Stockton-on-Tees	2/0	1/7
Stoke-on-Trent C.B.	2/0	1/7
Stourbridge M.B.	2/0	1/7
Stourport U.D.	1/11½	1/6½
Stowmarket	1/9	1/4½
Stratford-on-Avon M.B.	1/11	1/6½
Stroud	1/11	1/6½
Sunderland	2/0	1/7
Sutton Coldfield M.B.	2/0	1/7
Swaffham	1/8½	1/4½
Swanage	1/10	1/5½
Swansea	2/0	1/7
Swindon	1/10½	1/5½
Tamworth M.B.	1/11½	1/6½
Taunton	1/10½	1/5½
Tenterden	1/10	1/5½
Thames Haven	2/0	1/7
Thetford	1/9½	1/5
Thorpe Bay	1/11½	1/6½
Todmorden	2/0	1/7
Tonbridge	1/10½	1/5½
Torquay	1/11½	1/6½
Totnes	1/10	1/5½
Trowbridge	1/9	1/4½
Truro	1/9½	1/5
Tunbridge Wells	1/10½	1/5½
Uppingham (Salop)	1/11½	1/6½
Uttoxeter U.D.	1/10½	1/5½
Wakefield	2/0	1/7
Walsall C.B.	2/0	1/7
Walsden	2/0	1/7
Walton-on-Naze	1/10	1/5½
Ware	1/11½	1/6½
Warminster	1/9	1/4½
Warrington	2/0	1/7
Warwick M.B.	2/0	1/7
Wellington R.D.	1/11½	1/6½
Welwyn	1/11	1/6½
Welwyn Gar. City	2/0	1/7
Wells (Norfolk)	1/8½	1/4½
West Bromwich C.B.	2/0	1/7
Westcliff-on-Sea	1/11½	1/6½
Weston-super-Mare	1/11	1/6½
Weybridge	1/11	1/6½
Weymouth	1/10	1/5½
Whitby	1/11	1/6½
Whitstable	1/10	1/5½
Widnes	2/0	1/7
Wigan	2/0	1/7
Wigton	1/10½	1/5½
Willington	2/0	1/7
Wilmslow	2/0	1/7
Winchester	1/10½	1/5½
Windermere	1/10½	1/5½
Windsor	1/11	1/6½
Wisbech	1/9½	1/5
Witham	1/10	1/5½
Woking	1/10½	1/5½
Wokingham	1/10	1/5½
Wolverhampton C.B.	2/0	1/7
Woodbridge	1/9½	1/5
Worcester C.B.	1/11½	1/6½
Workington	1/10½	1/5½
Worksop	1/11½	1/6½
Worthing	1/10	1/5½
Wrexham	1/11½	1/6½
Wroxham	1/9½	1/5
Wycombe	1/11	1/6½
Wymondham	1/9	1/4½
Yeovil	1/10½	1/5½
York	2/0	1/7

† Plus 2d. per working day. ‡ Plasterers 2/1½. ¶ Tradesmen's Labourers, 1/7½. Navvies and General Labourers, 1/0½.

§ Joiners, Plumbers, Bricklayers, Tilers and Masons receive 2/- per week or 4d. per day Tool Money.

NOTE.—Carpenters, Joiners and Plumbers in all Towns and Districts (other than Birkenhead and Liverpool) receive 2d. per day Tool Allowance.

For Building Trade Wages in Scotland, see page 411

PRICES CURRENT OF MATERIALS*

NOTE.—These prices apply to large quantities of materials at works at London stations, or site, in London area as stated. Prices for smaller quantities ex merchant's warehouse will of course be higher. Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry. The prices of soft woods are for cash on delivery.

BRICKS, &c.

	£ s. d.
First Hard Stocks	4 16 0
Second Hard Stocks	4 9 0
Mild Stocks	3 16 0
Single Rough Stocks	3 10 0
Common Stocks	3 0 6

All loaded free into lorry at the works. The question of haulage is still very difficult and prices must be obtained from job to job. *In addition*, there will be the Levy under the Bricks (Charges) Order, 1942, of 3s. per 1,000.

2½ in. Phorpres. A discount of 6d. 1,000 only monthly account.	London Rated Stations per 1,000 £ s. d.	Site in London Area, North of Thames per 1,000 s. d.
Pressed	57 0	67 0
Keyed	59 0	69 0
Single Bullnose	77 0	87 0
Rustics	77 0	87 0
Whites	77 6	87 0

	£ s. d.
Best blue Pressed Staffs. (London Stns.)	11 12 0
Do. Bullnose (London Stns.)	12 2 0
Blue Wire Cuts (London Stns.)	10 9 6

Best Stourbridge Fire Brick (London Stns.) :—

£ s. d.	£ s. d.
2½ in. 10 0 0	3 in. 12 0 0

GLAZED BRICKS (London Stns.). Add 12½% to Prices.

Best White Ivory and Salt Glazed	D'ble Str'tch'rs 38 10 0
	D'ble Headers 35 10 0
Stretcher 30 0 0	One side&two ends 39 10 0
Headers 29 10 0	Two sides&one end 40 10 0
Quoins, Bullnose and 4½in.Flats 36 10 0	Splays and Squints 38 0 0

Second Quality, £2 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours. Hard Glaze, £5 10s. extra over white.

ADD LEVY ON BRICKS, 3/– per 1,000 except Glazed Bricks.

PARTITION SLABS.

Delivered on site London Area.

"PHORPRES" HOLLOW PARTITION BLOCKS.

s. d.	s. d.
2" per yd. sup. .. 2 8	3" per yd. sup. .. 3 6
2½" " " 2 11	4" " " 3 10

CLINKER CONCRETE.

2" per yd. sup. .. 1 11	3" per yd. sup. .. 2 6
2½" " " 2 3	4" " " 3 6

CRANHAM TERRA COTTA.

Size 12 x 9 x 2" per yd. super	2 8
Size 12 x 9 x 2½" "	2 11
Size 12 x 9 x 3" "	3 6
Size 12 x 9 x 4" "	3 10

HEMPSTEAD—KEYED TWO SIDES.

12" x 9" x 2" 2 8	12" x 9" x 3" 3 6
12" x 9" x 2½" 2 11	12" x 9" x 4" 3 10

Per yard super d/d. Free on site, London.

Plus 2d. for smooth one side, and 4d. for smooth both sides.

STONE.

	s. d.
BATH STONE.—Delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	3 3½
BEER STONE—RANDOM BLOCK—	
Free on rail at Seaton Station per ft. cube	2 3
Delivered free on rail Nine Elms, S.R. "	3 1½
Selected approximate size one way, 1d. per cubic ft. extra, selected approximately three sizes or for special work, 3d. per cubic ft. extra.	
PORTLAND STONE—	
Brown Whibed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, S. Rly., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R. .... per ft. cube	4 7
Do. do. delivered on road waggons as above stations .... per ft. cub.	4 7
White basebed, 3d. per ft. cube extra.	
NOTE.—1d. per ft. cube extra for every ft. over 20 ft. *average* and ¼d. beyond 30 ft.	
HOPTON-WOOD STONE—	
F.O.R. Quarries, Wirksworth, Derbyshire, Random blocks from 10ft. and over P.ft.cb.	s. d. 13 2
Sawn two sides	26 11
Sawn three or four sides	31 11
YORK STONE, BLUE—*Robin Hood Quality.*	
Delivered at any Goods Station, London.	
6 in. sawn two sides landings to sizes (under 30 ft. super) .... per ft. super	5 6
6 in. rubbed two sides, ditto "	6 3
3 in. sawn two sides slabs (random sizes) .... "	2 7
2 in. to 2½ in. sawn one side slabs (random sizes) (paving) "	1 8½
1½ in. to 2 in. ditto .... "	1 4½
HARD YORK—	
Delivered at any Goods Station, London.	
Scrappled random blocks .. per ft. cube	6 10
6 in. sawn two sides landings to sizes (under 40 ft. super) .... per ft. super	5 7½
6 in. rubbed two sides, ditto "	6 9
4 in. sawn two sides slabs (random sizes) .... "	3 5
3 in. ditto ditto .... "	2 8
2 in. self-faced random flags .. per yd. super	8 9

CAST STONE.

Delivered in London area in full van loads, per ft. cube : Plain, 7s. 6d. Moulded, 8s. 6d.

Small section cills and copings, 11s.

SAND.

Thames Ballast	11s. 6d. per yd.	delivered 2 miles radius Paddington.
Pit Ballast	10s. 0d. " "	
Pit Sand	12s. 0d. " "	
Washed Sand	13s. 0d. " "	
¼ in. Shingle	10s. 6d. " "	
½ in. Broken Brick	16s. 0d. " "	
Pan Breeze	10s. 0d. " "	

CEMENT.

Best British Portland Cement, delivered London area.	Standard Specification £ s. d.
6 ton loads and upwards site .... per ton	2 11 0
1 to 6 tons site	2 14 0
Alongside Vauxhall in 80-ton lots	2 8 6
" Ferrocrete " Rapid Hardening Cement—	
6 ton loads and upwards site	2 17 0
1 to 6 tons site	3 0 0
Alongside Vauxhall in 80-ton lots	2 14 6
" Aquacrete " Water Repellent, " Blue Circle" cement, 30s. per ton on ordinary " Blue Circle " prices.	
" Colorcrete " Nos.1 and 2. Coloured rapid Hardening Portland Cement in 6 ton lots	4 11 0
" Colorcrete " not rapid hardening, according to colour, from £7 to £15 10s. per ton.	
" Snowcrete " White Portland Cement (in free paper bags)	11 5 0
Under one ton .. .. .. per cwt.	0 13 2
" 417 " Cement (Ultra Rapid Hardening) Delivered Site London Area in 6 tons lots and upwards	3 11 0
Plus packages at current prices.	
Super Cement (Waterproof), bags extra.	4 1 0

NOTE.—Jute sacks charged at 35s. 6d. nett per ton (20 sacks) for quantities of or exceeding one ton.

Less than one ton 1s. 9½d. nett each.

Credit 1s. 6d. nett each when returned in good condition within two weeks.

£ s. d.	£ s. d.
Roman Cement 8 10 0	Keene's Cement, White 7 0 0
Parian Cement 7 0 0	" " Pink 6 10 0

Cementone Colours for cement according to tints, per cwt. from £3 5s. 0d.

SLATES.

First quality slates from Penrhyn or Portmadoc, carriage paid in full truck loads to London Rate Station.

Per 1,000 actual	£ s. d.		£ s. d.
24 by 12	45 5 0	18 by 10	24 0 6
22 by 12	37 17 6	18 by 9	22 12 0
22 by 11	34 2 6	16 by 10	21 10 6
20 by 12	33 0 0	16 by 8	16 12 6
20 by 10	30 5 0		

Having Secured the Contract— what about the Steel Scaffolding?

TUBULAR

—S&C—

SCAFFOLDING

For the lowest Prices apply to the Oldest Firm in the Scaffolding Trade.

STEPHENS & CARTER LTD.

The British Steel Scaffolding Co.

731-761, HARROW RD., N.W.10

Telephone No. Ladbroke 1101 (6 lines)

PLASTER.

	£ s. d.		£ s. d.
Coarse, Pink	4 2 6	Strapite, Coarse	4 11 6
" White	4 10 0	" Finish	4 19 6
Pioneer	5 5 0		

Above prices for 4-ton loads and over London Area.

Best Ground Blue		Grey Stone Line	3 1 0
Lias Lime ..	3 7 6	Chalk Lime	3 1 0
Granite Chippings	2 0 0	Hair per cwt. ..	3 15 0

NOTE.—Sacks are charged 1s. 9d. each, and credited 1s. 6d. if returned in good condition within three months, carriage paid.

Stourbridge Fireclay in paper bags, £2 12s. 6d. 6-ton lots at railway depot.

TILES.

Delivered at London rate stations in full truck loads of not less than 6 tons .... Per 1,000 f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district	£6 12 9
Ditto hand-made ditto	7 19 9
Ornamental ditto	8 7 0
Hip and valley tiles—Hand-made (per dozen)	16 4
—Machine-made	15 7

HARD WOOD.

1 INCH AND UP THICK.

Average price for prime quality	Foot cube. s. d.	£ s. d.
Dry English Wainscot Billets	16 0	to 0 18 0
Dry Slavonian Billet Wainscot	17 0	to 1 0 0
Dry Cuba Mahogany logs	21 0	to 1 4 0
Square-edged Honduras Mahogany		0 16 6
Log Cut Honduras Mahogany		0 17 6
American Figured Oak		0 13 0
American Plain Oak		0 12 6
Jap, Figured Oak		0 13 0
Jap, Plain Oak		0 12 6
Teak		0 15 6
American Whitewood		0 12 6
African Whitewood		0 8 0
African Mahogany		0 11 0
Australian Walnut		0 19 0
Australian Silky Oak		0 12 6
Best Scotch glue	per cwt.	5 0 0
Liquid glue	per gallon	1 2 0

SOFT WOOD.

MERCHANTABLE BRITISH COLUMBIAN PINE.

	Minimum. £ s. d.	Maximum. £ s. d.
Scantlings in imported sizes		
2 in. by 3 in. to 4 in. by 11 in.	47 0 0	58 0 0

PLANED BOARDS.

PRIME CLEAR BRITISH COLUMBIAN PINE.

	Per standard. £ s. d.
1 in. by 11 in. / 1 in. by 9 in.	71 0 0
	Per square. s. d.
1 in. plain edge flooring	56 3
1¼ in. ditto	70 6
1 in. tongued and grooved	56 3
1¼ in. ditto	70 6

MATCHING.

	per square. s. d.
¾ in.	40 0
⅞ in.	45 3
1 in.	59 0

PLUMBERS' BRASS WORK.

Delivered in London.

M.O.H.

S.D. BIBCOCKS CRUTCH HEAD, FOR IRON

½ in.	¾ in.
33/–	51/– per doz.

TOILET BIB COCKS FOR IRON.

½ in.	¾ in.
60/–	72/– per doz.

S.D. STOP COCKS FOR IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
33/–	48/–	86/–	209/–	281/–	456/– per doz.

S.D.S. COCKS WITH TWO UNIONS FOR LEAD.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
45/–	77/6	123/–	240/–	372/–	624/– per doz.

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
5/6	6/8	11/–	24/–	36/–	56/– per doz.

HEAVY CROYDON BALL VALVES.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
72/–	115/–	144/–	288/–	384/– per doz.

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
14/–	18/6	25/9	45/3	64/9	71/6 per doz.

BRASS SLEEVES.

1¼ in.	2 in.	3 in.	3½ in.	4 in.
10/9	13/6	25/–	37/–	46/– per doz.

LEAD TRAPS WITH BRASS CLEANING SCREWS.

	1½×6 lbs.	1½ × 6 lbs.	2 × 7 lbs.	3 × 7 lbs.
Lead P.	26/–	34/–	55/–	92/– per doz.
Lead S.	34/–	41/–	67/–	115/– per doz.

SOLDER.—Plumbers', 1/7. Tinmen's, 2/1. Blow pipe 2/6 per lb.

* The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information. Prices are subject to 2½ per cent. cash discount.

PRICES CURRENT OF MATERIALS—(contd.)

See Note at top of preceding page.

METALS.

	£	s.	d.
JOISTS, GIRDERS, &c., to LONDON STATION PER TON—			
R.S. Joists, cut and fitted	£24	0	0
Plain Compound Girders	26	10	0
Stanchions	29	0	0
In Roof Work	35	0	0

NOTE.—These prices are for standard pieces and not special pieces of an awkward nature.

MILD STEEL ROUNDS.—To London Stations, per ton.

Diameter.	£	s.	d.	Diameter.	£	s.	d.
⅜ in.	23	5	0	½ in.	21	15	0
⅞ in.	22	15	0	⅝ in. to 2¾ in.	21	5	0
¾ in.	22	5	0				

WROUGHT TUBES AND FITTINGS.

Deliveries from works.

Deliveries from London stock further 2½% gross. 10/17

	Tubes. ¼"/6" %	Tubulars. ¼"/6" %	19/24" %	¼"/2" %	2½"/6" %
Light weight	51½	—	47½	51	57½
Heavy weight	44	44	39½	41	49½
Galv. lightweight	30	—	30	30	30
Galv. heavyweight	20	20	20	20	20

Tubes and tubulars sizes ⅛"/⅜" inclusive, charged extra of 5% less gross.

Fittings. Figs. 25/34 5% less gross discount.

Terms.—Nett cash end of month following date of invoice. Carriage paid on lots of £10 nett value and over.

C.I. HALF-ROUND GUTTERS—London Works, per yd. in 6 ft. lengths. Prices ex Stop ends.

	Gutters.	Nozzles.	
3 in.	1/5½	1/2½	4½d.
3½ in.	1/7	1/4	4½d.
4 in.	1/7	1/6	6½d.
4½ in.	1/8½	1/8½	7½d.
5 in.	2/0½	2/0	9d.

O.G. GUTTERS.

3 in.	1/10½	1/7½	5d.
3½ in.	2/1½	1/7½	6½d.
4 in.	2/1½	1/8½	7½d.
4½ in.	2/2½	1/11½	8½d.
5 in.	2/8½	2/3	10½d.

RAIN WATER PIPES.

Per yd. in 6 fts. Pipe. Bends. Stock angles. Branches.

2 in.	2/2½	1/5½	2/2
2½ in.	2/3½	1/8½	2/7½
3 in.	2/8½	2/1½	3/2
3½ in.	3/2½	2/6½	3/7½
4 in.	3/8½	3/0½	4/5

NETT PRICES.

Tonnage allowance—4-ton lots, 5 per cent. 2-ton lots, 2½ per cent.

L.C.C. COATED SOIL PIPES—London Prices, ex Stock.

Per yd. in 6 fts.	Pipe.	Bends.	Branches
2 in.	3/9½	2/7½	3/2
2½ in.	4/5	2/10½	3/11½
3 in.	4/9	3/2	4/8½
3½ in.	4/10½	3/11½	5/5½
4 in.	5/3½	4/5	6/3½

L.C.C. COATED DRAIN PIPE.

	cwt.	qr.	lbs. in 9 fts.	per yard.	Bends.	Branches.
3 in.	0	3	14	6/0	7/3	11/6
4 in.	1	1	17	8/7	8/2	14/5
5 in.	1	2	18	10/7	14/9	22/3
6 in.	2	0	1	12/9	17/0	29/8

Gaskin, 75/- per cwt.

	Per ton basis in London. £	s.	d.
IRON.—Staffordshire Crown, Merchant quality	18	7	6
IRON.—Staffordshire Marked Bars	19	7	6
Mild Steel Bars	19	15	0
Mild Steel Hoops	21	10	0
Ex Merchant's Stock, per ton (two-ton lots).			
Soft Steel Sheets, C.R. and C.A.—			
20 gauge	24	17	6
24 gauge	25	2	6
26 gauge	25	17	6
Galvanised Corrugated Sheets, 6 ft. to 9 ft.—			
20 gauge	27	0	0
24 gauge	27	10	0
26 gauge	28	15	0
Galvanised Flat Sheets, C.R. and C.A.—			
20 gauge	28	10	0
24 gauge	29	0	0
26 gauge	30	5	0
	Per ton £	s.	d.
Cut Nails, 3 in. and up	28	10	0

ALL NETT.

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 2s. 4d. to 2s. 7d. per foot super.

PAINTS, &c.

	£	s.	d.
Raw Linseed Oil (5 galls.) per gallon	0	7	0
Boiled Linseed Oil (5 galls.) "	0	7	4
Genuine Ground English White Lead, per cwt.	3	11	9
Genuine White Lead Paint, 14-lb. tins free, per cwt.	4	16	6
Genuine Red Lead "	2	18	6
Linseed Oil Putty (Kegs extra) "	1	5	3
Utility Putty (Packages returnable) "	1	3	9
Size, XD quality fkn.	0	4	9

Turpentine substitute can be obtained and prices vary according to quality from 3/8 gallon upwards.

BUILDING TRADE WAGES IN SCOTLAND

Following are grade rates authorised by the Scottish N.J.C. from February 1. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

Grade Classification	A	A1	A2	A3	B	B1
Craftsmen	2/0½	2/0	1/11½	1/11	1/10½	1/10
Labourers	1/7	1/6½	1/6½	1/6	1/5½	1/5½

Aberdeen A	Dumfriesshire A2	Inverness *	Perthshire A2
Ayrshire A	Dundee A	Inverurie A1	Peterhead A1
Banff B	Dunoon A	Kincardineshire A2	Renfrewshire A
Berwickshire A2	East Fife A	Kinross-shire A	Rothesay A
Bridge of Allan A	East Lothian A	Lanarkshire A	Roxburghshire A2
Broughty Ferry A	Edinburgh A	Midlothian A	St. Andrews A
Clackmannanshire A	Fifeshire A	Monifieth A	Selkirkshire A2
Doune A	Forfarshire A2	Moray and Nairn B	Stewartry A2
Dunblane A	Glasgow A	Newport A	Stirlingshire A
Dumbartonshire A	Greenock A	Peebleshire A2	Stornoway A2
Dumfries A1	Hamilton A	Perth A	Tayport A
			West Lothian A

*This town has its own rates: Masons, 1/9½; Carpenters, 1/9½; Slaters, 1/9½; Plumbers, 1/10; Plasterers, 1/10½ but 1/11 is paid owing to the scarcity at present; Painters, 1/9½ and Labourers, 1/5.

The information given in this table is copyright. Rates of wages in England and Wales are given on page 409

VARNISHES, &c.

		Per gallon. £	s.	d.
Oak Varnish	Outside	0	16	0
Fine do.	"	0	18	0
Fine Copal	"	1	0	0
Pale Copal	"	1	2	0
Pale Opal Carriage	"	1	6	0
Best do. do.	"	1	14	0
Floor Varnish	Inside	1	0	0
Fine Pale Paper	"	1	0	0
Fine Copal Cabinet	"	1	4	0
Fine Copal Flatting	"	1	2	0
Hard Drying Oak	"	1	0	0
Fine Hard Drying Oak	"	1	1	6
Fine Copal Varnish	"	1	2	6
Pale do.	"	1	14	0
Best do.	"	1	4	6
Best Japan Gold Size	"	1	14	6
Best Black Japan	"	0	12	0
Oak and Mahogany Stain (water)	"	0	14	0
Brunswick Black	"	0	9	6
Berlin Black	"	0	16	0
Knotting (patent)	"	0	17	0
French and Brush Polish	"	0	14	0
Liquid Dryers in Terebene	"	0	11	0

LEAD, &c.

(Delivered in London.)	Per ton. £	s.	d.
LEAD.—Sheet, English, 4 lb. and up	38	0	0
Pipe in coils	38	10	0
Soil pipe	42	10	0
Compo pipe	47	10	0

NOTE.—Country delivery, 20/- per ton extra, lots under 3 cwt. 4/- per cwt. extra and over 3 cwt. and under 5 cwt., 2/6 per cwt. extra. Cut to sizes, 4/- per cwt. extra.

Old lead, ex London area, at Mills.....per ton £18 0 0.

"Patent Roof GLAZING

The Hall Mark AYGEE of Craftsmanship

Actual manufacturers of patent glazing. Lantern and Skylights, Metal Windows, etc.

AYGEE LTD.

Metal Window Manufacturers, Light Steel Constructional Engineers.

100 WESTMINSTER BRIDGE RD., S.E.1

Ring: Waterloo 6314 (6 lines)

THE SCOTTISH BUILDER

NEW BUILDINGS

CLELAND.—Lanarkshire C.C. to erect houses. Plans by Mr. William Watt, Albert-st., Motherwell.

KIRKLEBANK.—Plans prepared for alterations and additions, for which the architects are David Purdie & Sons, 107, North Veunel, Lanark.

RUTHERGLEN.—Plans prepared for canteen at Dalmarnock-rd., for which the architects and quantity surveyors are James Davidson & Son, 6, Academy-pl., Coatbridge.

Scottish Slate Quarries Association.

As a result of negotiations which have lately taken place between representatives of slate quarrying interests in Scotland, and the Building Materials Committee of the Scottish Development Council, the industry has now formed a Scottish Slate Quarries Association, with headquarters at the Scottish Building Centre, 425-7, Sauchiehall-street, Glasgow, C.2.

GLASS.

SHEET GLASS, ORDINARY GLAZING QUALITY CUT SIZES.

	Per ft. super. d.
18 oz.	3½
24 oz. Clear or "R" quality	5
26 oz.	6½
32 oz.	8½

ENGLISH ROLLED PLATE AND FIGURED CATHEDRAL, ETC., IN CUT SIZES. Over 500 ft. super of all kinds.

	Per ft.
Rolled plate, ¼ in.	6½d.
Rough cast double rolled, ¼ in.	7½d.
Rough cast double rolled, ⅜ in.	7½d.
Figured rolled, and Cathedral, white	6½d.
Figured rolled and Cathedral, tinted	9½d.
Rolled Sheet	6d.
Reeded, Broad Reeded, Cross Reeded and Chevron Reeded, ¼ in. thick	10½d.

Rolled plate is the same price as rough cast double rolled.

	Per ft. s.	d.
Wire Rolled, ¼ in. thick	0	9½
Wire Cast, ¼ in. thick	0	9½
Georgian Wired Cast	0	10
"Calorex" Sheet, 21 oz.	2	6
" 32 oz.	4	0
" Cast, ¼ in. thick	0	9½
" " ⅜ in. thick	1	0
" " ½ in. thick	1	2
Non Actinic Glass, ¼ in. thick	0	9½
" " " ⅜ in. thick	1	0
" " " ½ in. thick	1	2

"VITA" GLASS.	Per ft. s.	d.
"Vita" Plate Glass, about ⅛ in. thick—		
To 7 ft. super	5	0
Over 7 ft. super	7	6
"Vita" Sheet Glass, about 18/20 oz.	2	0
Cathedral "Vita" Glass:		
¼ in. thickness	2	0
⅜ in. "	3	0
½ in. Georgian Wired "Vita" Glass	3	6

GLASS BRICKS.	s.	d.	
P.B. 1—8 in. × 4¼ in. × 3¼ in.	2	9	each nett
P.B. 2—5¼ in. × 5¼ in. × 3¼ in.	2	6	"
P.B. 3—7¼ in. × 7¼ in. × 3¼ in.	3	6	"
P.B. 32—7¼ in. × 7¼ in. × 3¼ in.	3	6	"

Radiused Corner Bricks to match up with—

P.B. 2	4	6	each nett
P.B. 3	6	0	"
P.B. 32	6	0	"

NEWS ITEMS

Building Societies to Amalgamate.

Negotiations are in progress for the amalgamation, under the name of the British Building Society, of two of the largest and oldest building societies—the Leeds Permanent and the Woolwich Equitable—which were established in 1848 and 1847 respectively. The assets of these two societies exceed £80,000,000. It is hoped, in the course of a few months, to strengthen still further the amalgamation of these two long-established societies by the incorporation, with the consent of their members, of the Liverpool Investment and the Dunfermline Building Societies.

British Standards.

The following B.S. Specification has been issued from 28, Victoria-street, S.W.1: Aluminium Alloy Sections—B.S. 1161-1944. (Price 2s. post free.)

Plastics Joint Industrial Council.

The plastics materials industry has set up a Joint Industrial Council to deal with wage rates and conditions of employment of labour. The chairman is elected annually from either side alternately. The Council functions in relation to the main Joint Industrial Council for the Chemical Industry; it includes representatives of the unions involved and selected representative firms in the plastics materials industry which is allied to the chemical industry; thus rates of wages and conditions of employment in the firms represented on the Council are controlled by national agreements. The chairman for 1944 is Mr. H. V. Potter, B.Sc., F.I.C., M.I.Chem.E., Managing Director of Bakelite, Ltd.

Preventable Fires.

In a survey of non-enemy fires compiled for the National Campaign Against Fire Wastage, figures show that in the London region alone last year there were 10,406 outbreaks to which the N.F.S. was called. Out of these, 4,182 occurred on industrial premises. This works out at approximately one fire in every two hours. The other 6,224 were of domestic origin. The causes of 9,507 of the fires are known, and it has been established that about 80 per cent. (7,651) could have been prevented. Carelessness in many forms was definitely responsible for 45 per cent. of the total. The following table gives an analysis of some of the causes:—

Defective chimney flues, 1,747; careless smoking, 2,598; children playing with fire, 630; sparks from railway engines, 629; electrical defects, 624; overheating boilers and stoves, 336; embers from burning rubbish, 177; and spontaneous ignition, 145.

Chemical Processes: Conference.

The Institution of Chemical Engineers and the Institute of Physics announce a joint conference on "Instruments for the Automatic Controlling and Recording of Chemical and Other Processes," provisionally to take place in London on Friday and Saturday, September 22 and 23. Further particulars from the Organising Secretary, Joint Conference, c/o The Institution of Chemical Engineers, 56, Victoria-street, London, S.W.1.

TRADE NEWS

Changes of Address.

Messrs. F. McNeill and Co., Ltd., are now established in their London office at 10, Lower Grosvenor-place, S.W.1. (Telephone: Victoria 6022.) The general sales and order departments will operate from the London office. Other departments are remaining at Pixham Firs, Dorking.

The national office of the Ballast, Sand and Allied Trades Association has been removed to Commonwealth House, New Oxford-street, London, W.C.1. Temporary telephone: Chancery 6041. Extn. 128. The Finance and Subscription Department remains at 2, Wellesley-road, Twickenham, Middx. Telephone: Popesgrove 1791.

FUTURE CONSTRUCTION

The Editor welcomes authentic information for this section from architects, surveyors or contractors. Items should reach 4, Catherine-street, Aldwych, W.C.2, not later than Tuesday morning.

CONTRACTS OPEN

For some contracts still open, but not included in this list, see previous issues. Those with an asterisk are advertised in this number. The dates at the heads of paragraphs are those for the submission of tenders; a dagger (†) denotes closing date for applications; the name and address at the end refer to the person from whom particulars may be obtained.

BUILDING

MAY 22.

Weymouth and Melcombe Regis T.C.—Completion from dampcourse level of 28 houses at Hereford-road. B.E. and S., 1s, Frederick-place, Weymouth. Dep. £2 2s.

MAY 23.

†**Notts C.C.**—Erection of scullery at Arnold Robert Mellor's School. County Architect, Shire Hall, Nottingham. Dep. £1 1s.

MAY 24.

Thurles U.D.C.—(1) Erection of 3 four-roomed houses at Kickham-st.; (2) six four-roomed houses at Stradavoher. T.C. Dep., £3 3s.

MAY 25.

Edinburgh.—Erection of club buildings at West Pilton-dr. E. Wilcock, hon. secretary, West Pilton Youth Centre Committee, 15, Easter Drylaw-pl., West Pilton, Edinburgh.

Manchester P.H.C.—Supply and erection of hay barn at Langho Colony. City Architect. Dep. £1 1s.

MAY 26.

†***Essex C.C.**—Alterations at South Woodford Senior School at £2,800. J. Stuart (F.), County Architect, County Hall, Chelmsford.

North Riding E.C.—Erection of kitchen at Helmsley and adaptation work for school meals at Ampleforth and Numington Village halls. F. Barraclough, Secretary, Ed. Offices, County Hall, Northallerton.

MAY 27.

†***Malden and Coombe T.C.**—Minor alterations, painting, etc., at first-aid posts, at Burlington-rd. and Presburg-rd. B.E.

Merioneth E.C.—Erection of prefabricated canteen kitchen and dining-room at Harlech School. County Architect, County Offices, Dolgelley.

Sheffield E.C.—Erection of preparation and cold rooms at Hastings-rd. food depot. W. G. Davies, City Architect. Dep. £2.

MAY 29.

Montgomeryshire E.C.—(1) Erection of canteen kitchen and dining-room at Llandinam School; (2) construction of brick kitchen at Llandyssil C.E. School. T. G. Davies, D. of E., County Ed. Offices, Newtown. Dep., £2 2s.

JUNE 3.

Belper R.D.C.—Erection of 2 pairs of houses at Park Nook, nr. Quarndon, N. Blackwell Wood (L.), 34, Irongate, Derby. Dep., £2 2s.

FEDERATED EMPLOYERS' FIRE & ACCIDENT ASSOCIATION

The Leading Office for

Contract Guarantee Bonds

ALSO

FIRE

WORKMEN'S COMPENSATION

PUBLIC LIABILITY

MOTOR

ETC. ETC.

Head Office:

8 KING STREET, MANCHESTER, 2

London Office:

23, Lawrence Lane, Cheapside, London, E.C.2

JUNE 5.

***Hornsey T.C.**—Works at maternity and child welfare centres: (1) Structural alterations and decorations at Centre No. 2, Burgoyne Hall, N4; (2) Conversion of premises at Fortis Green, N.10, to Centre No. 5; (3) Erection of perambulator sheds at Centres Nos. 1, 2 and 5. J. H. Melville Richards, B.E. and S. Dep. £2.

JUNE 14.

Salford T.C.—Erection of prefabricated building, together with site works, foundations and finishings at Summerville estate. City E.

PAINTING, ELECTRIC LIGHTING, HEATING, ETC.

MAY 22.

Bury C.B.—Internal and external decoration at various schools. B.S.

Bushey U.D.C.—Internal decoration of 71 houses and external painting of 55 houses. S.

Chadderton E.C.—External painting at Eustace-st. School; internal painting and decorating and external painting at Stanley-rd. School. E. and S.

Newcastle and Gateshead Bridge Committee.—Cleansing and painting of steel, iron and woodwork of Tyne Bridge. City E.

Rugby T.C.—Contract A.—Internal decoration of 56 houses, Croop Hill (1919) estate; Contract B.—External decoration of 130 houses Addison-rd. (1930) estate. B.E. and S., 23, Murray-rd.

Whittingham Mental Hospital.—Exterior painting. W. A. Higgs, Acting Clerk and Steward, the Hospital, near Preston, Lancs.

York E.C.—Painting work at various schools. C. J. Minter, City E. Dep., £1 1s.

MAY 23.

Leeds E.C.—Painting and decorating of schools and other educational buildings. D. of E., Ed. Offices, Leeds, 1.

MAY 25.

Rugby R.D.C.—External painting of 136 houses in various parishes. D. G. McVinnie, E. and S., 24, Warwick-st., Rugby.

MAY 31.

Cudworth U.D.C.—External painting of 136 houses at Darfield-rd. estate. D. J. D. Woodhall, E. and S.

JUNE 8.

Leyton T.C.—Internal and external painting and repairs to school buildings. A. P. Howell, M.Inst.C.E., B.E. and S. Dep. £1.

JUNE 12.

Montgomeryshire E.C. — For redecorating various schools. D. of E., County Ed. Offices, Newtown.

NO DATE.

Ashton-under-Lyne.—Internal painting at District Infirmary. F. Oliver, general superintendent.

ENGINEERING, IRON AND STEEL

MAY 22.

Lisburn R.C.—New kitchen at Lisburn and Hillsborough District Hospital. R. Ferguson and S. M'Ilveen, 36-38, Scottish Provident Buildings, Belfast. Dep., £2 2s.

ROAD, SEWERAGE AND WATER WORKS

MAY 20.

Dartford T.C.—Completing construction of roads and sewers at Princess-rd. housing estate. B.S. Dep., £2 2s.

Hornsea U.D.C.—Surface dressing of 38,000 yds. sup. of roads. Robert Chart, E. and S., Town Hall, Hornsea, E. Yorks.

MAY 25.

Bridgnorth T.C.—Water supply scheme. I. M. Nicholson, B.E., Municipal Offices. Dep., £2 2s.

West Hartlepool C.B.—Surface dressing 200,000 sq. yds. B.E. and S.

MAY 27.

West Kesteven R.D.C.—Extension to sewage disposal works, Claypole. S., 19, Watergate, Grantham.

MAY 31.

Maldon T.C.—Surface dressing. B.E.

Witney R.D.C.—Laying of water mains. S., 103, High-st., Witney.

JUNE 7.

Droylsden U.D.C.—Paving repairs. E. and S.

PUBLIC APPOINTMENTS

MAY 22.

Liverpool E.C.—Workshop Assistant in Dept. of Building, The Technical College. Trade union rates: D. of E., 14, Sir Thomas-st., Liverpool.

MAY 30.

Leeds Housing Dept.—(1) Two Principal Assistant Architects. (2) One Senior Structural Engineer. (3) One Senior Assistant Surveyor. Application forms from R. A. H. Livett (A.), Housing Director, Priestley House, Quarry-hill, Leeds, 9.

MAY 31.

***Isle of Wight E.C.**—Headmaster of new Junior Building School. £500 p.a., plus war bonus. Application forms from A. L. Hutchinson, D. of E., Ed. Offices, County Hall, Newport, I. of W. (Stamped addressed foolscape envelope.)

Northern Polytechnic.—Full-time post of Teacher of Building Construction and Allied Subjects. Forms of application from R. H. Currell, C., Northern Polytechnic, Holloway-road, N.7.

JUNE 2.

Exeter T.C.—City Architect. Must be over 35 and member of R.I.B.A. £900-£50-£1,000, plus cost of living bonus. Applications (no forms issued) to C. J. Newman, T.C., Exeter.

***Ipswich School of Technology.**—(a) Head of Department of Building. Scale £450-£20-£550. (b) Staff (i) Building subjects, (ii) English Subjects, (iii) Mathematics and General Science. Forms of application from J. T. Hill, Secretary for Ed., Tower House, Ipswich.

JUNE 3.

***Cornwall C.C.**—Two Senior Architectural Assistants. Forms of application from County Architect, County Hall, Truro.

***Manchester T.C.**—Temporary Town Planning Assistants. R. H. Adcock, T.C.

North Riding E.C.—Assistant Master for Maths. and General Science, Scarborough T. Inst., to begin Sept. 1. Burnham scale. Application forms from Principal, Technical Inst., Westbourne-grove, Scarborough.

***Somerset C.C.**—Temporary Class II Architectural Assistants. £310-£10-£350, plus war bonus. R. O. Harris (A.), County Architect, Park-st., Taunton.

JUNE 5.

***Eastbourne.**—Assistant Master to teach Building Subjects, including Plumbing. Applications to Headmaster, Junior Technical School and Evening Institute, "The Grange," St. Anne's-rd., Eastbourne.

JUNE 14.

***West Sussex C.C.**—Two Masters at Junior Technical School for Building, Bognor Regis. Forms of application from D. of E., County Hall, Chichester.

JUNE 30.

Belfast Education Authority.—Head of Building Trades Department at College of Technology. £600-£25-£700 or £900. Application form from J. Stuart Hawnt, D. of E., Education Office, College of Technology, Belfast.

NO DATE.

***Worcester Ed. Dept.**—Teacher of Building Subjects at Victoria Institute. Particulars from Secretary of Education, 4, Copenhagen-st., Worcester.

GENERAL BUILDING WORK

Ashington.—H. Wiles, 11, Bude-gdns., Low Fell, Gateshead, preparing rebuilding scheme for dance and public hall.

Bangor, North Wales.—Board of Governors of Court of Governors of University College of North Wales propose improvement at Women's Halls of Residence, extension of Men's Halls of Residence and additional library accommodation.

Bangor, North Wales.—Y.W.C.A. propose community centre at Maesgeirchen estate.

Belper.—Free Church Council propose conversion of premises at Market-pl., for youth centre.

Bolton.—E.C. approved erection of buildings, etc., at Spring Bank House, Turton, for farm school.

Bromsgrove.—R.D.C. approved welfare clinic at Wootton-rd., West Heath, for Worcs E.C.

Burnley.—T.C. propose additional accommodation at Bank Hall Maternity Hospital.

Chester.—T.C. propose nursery at Wrexham-rd.

Chesterfield.—Derbyshire E.C. propose Grammar school at Brookside Bar, Brampton.

Corley, Warwicks.—Village Hall Association propose hall and playing fields.

Coventry.—Social Welfare Committee propose adaptation of Moat House, Walsgrave-on-Sowe, for institutional accommodation.—Libraries Committee propose branch library at Wyken.—C. H. Osborne, quantity surveyor, 44, Bayley-la., to prepare quantities for extensions at Stretton residential nursery.

Eccles.—Committee of War Workers' Club, 14, Abbey-gr., propose erection of building for recreation room.

Fleetwood.—T.C. to erect 21 tram shelters on selected sites.

Gateshead.—T.C. to adapt house at Saltwell View as old people's home.

Gateshead.—T.C. approved £2,000 plan for alterations at Central Transport depot.

Gateshead.—H. Wiles, 11, Bude-gdns., Low Fell, Gateshead, is architect for business premises for Mr. Bird.

Hebburn-on-Tyne.—Palmers (Hebburn), Ltd., to extend offices. T. R. Percy, estate agent, Argyle-st., proposes converting billiards saloon at Station-rd., into auction rooms.—Plans prepared by Cackett, Burns Dick & McKellar, Ellison-pl., Newcastle-on-Tyne, for erection of blackout loading bays.

Hereford.—T.C. approved 21 passenger 'bus shelters.

Hull.—T.C. propose central building for youth centre.

Lancashire.—E.C. propose erection of Dutch barn at Crombleholme Farm, Hambleton, at £300.

Lancaster.—T.C. approved: Conversion of games room into five bedrooms at Conservative Club, Church-st., for Committee; conversion of Carr House, Regent-st., into two flats.

Leicester.—Leics E.C. propose reinstatement of classrooms at Desford Junior schools, at £658; also extensions at Glen Hills school.

Lichfield.—Staffs E.C. propose temporary classrooms, cloakrooms, etc., at Friary school.

Loughborough.—Leics E.C. approved erection of additional gymnasium at Loughborough College, at £12,000.

Manchester.—T.C. approved: Conversion of premises at Belford-rd., Didsbury, for Home for Aged Persons, for Sir E. D. Simon and others; additions to flats, Fallowfield, for C. Barber, E. L. Doyle, architect, 26, Hollins-la., Marple Bridge; additions to Nurses' College, Rose Hill Convalescent Home, Longley-la., Northenden; reconstruction of club premises, Edward-st., Fallowfield; conversion into seven flats, premises, corner of Palatine-rd. and Gouldenrd., Withington, for P. Krell, E. L. Doyle, architect, 26, Hollins-la., Marple Bridge; conversion into four flats, premises at Lansdowne-rd., West Didsbury, for A. Bellis, B. Pendleton (L.), architect, 16, Brazennose-st.

Mansfield.—E.C. propose erection of sculleries at St. John's, St. Peter's, Rainworth, and King Edward schools.

Newcastle-on-Tyne.—Alterations and additions to be made to buildings at General Hospital, and Walker Hospital, to provide canteens. Plans by R. G. Roberts, City Architect, 18, Cloth Market.

Newcastle-under-Lyme. — T.C. approved: Block plan, Miners' Hostel, Knutton, for M.O.W.; T.C. propose adaptation of premises at Brunswick-st., for welfare clinic; conversion of premises at Chesterton for Maternity Hospital; T.C. to acquire sites for technical school and Girls' modern school.

Notts.—E.C. propose sculleries at C. of E. schools, Averham.

Oldham.—Committee of Women War Workers' Club propose club premises at Emmott's Mill, Greaves-st. and Clegg-st.

Scarborough.—Corporation Parks Committee approved in principle proposed alterations at South Bay bathing pool.

Salford.—T.C. approved construction and maintenance of static water tanks, at £2,800.

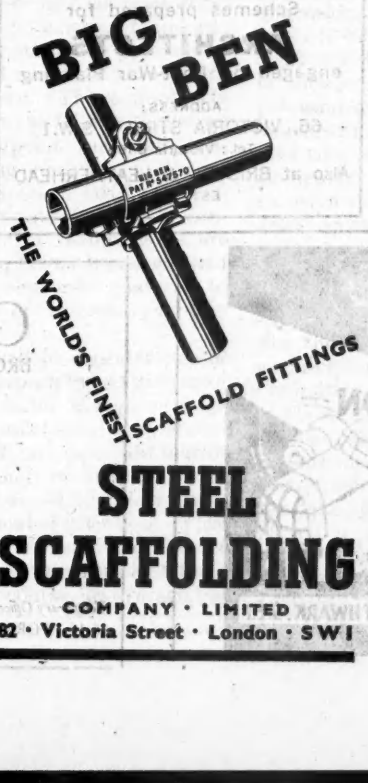
Shardlow.—R.D.C. propose sanitary conveniences at Weston-on-Trent.

Shrewsbury.—National Farmers' Union, 14a, The Square, acquired site at Barkers-st., for offices.

South Shields.—Repairs to be carried out at British Legion Club, Winchester-st., at £243.—T.C. propose to extend Maternity Hospital. Plans by N. G. Richardson, B.E.—Nursery to be erected at Y.M.C.A. recreation ground. Plans by B.E.

Stockport.—P.A.C. propose adaptation of premises at St. Lesmo-rd., for children's home.—T.C. approved: Conversion to two flats at 252, Wellington-rd. South, for A. Berry; lavatory additions, for Kay Bros., Ltd.; additional shelter at Strathclyde House, for P.A.C.

Stockton-on-Tees. — Plans approved for dining-room and sculleries at Richard Hine and St. Cuthbert's schools, for E.C.



Sunderland.—W. & T. R. Milburn, 17, Fawcett-st., prepared plans for conversion of garage into dairy at Matamba-ter., for Hindell's Dairy Farmers, Ltd.

Towcester.—Northants E.C. propose two additional classrooms at Grammar school, at £2,600.

Tynemouth.—J. R. Wallace, 14, Northumberland-sq., North Shields, prepared plans for converting No. 2, Northumberland-ter. into flats.

Wellingborough.—Northants E.C. propose erection of Maycrete building at Technical Institute for building section, at £400.

Wigan.—Newtown Labour Club propose erection of headquarters.

Wigan.—Rev. T. Greenhous, P.P., Church of the Sacred Heart, Throstle Nest-av., and Catholic Authorities propose senior school at Springfield.

Workington.—N.F.S. propose fire station; T.C. propose public conveniences at Harrington-rd.

York.—T.C. received authority from M.H. for repairs, restoration, etc., of The Shambles, at £1,000.

BRITISH RESTAURANTS AND CANTEENS

Ashton-under-Lyne.—T.C. propose additional B.R.

Batley.—T.C. propose adaptation of Spiritualist Church, Wellington-st., for B.R.

Brighouse.—E.C. propose: School canteen kitchen at Southowram; additional equipment for Hipperholme and Rastrick B.R.s.

Dudley.—T.C. propose B.R. at Scotts Green.

Dunston-on-Tyne.—Plans by W. & T. R. Milburn, 17, Fawcett-st., Sunderland, for canteen at Dunston-on-Tyne, approved.

Glasgow.—Plans to be prepared for canteen at Caldwell House Institution, for which the architect is Robert Bruce, Municipal-bldgs.

Hereford.—T.C. approved extensions to canteen for Yeoman's Motors. Plans by G. W. Hiles, architect.

Hornby.—Lancashire E.C. propose school kitchen at Lune Valley area.

Lanarkshire.—Plans in hand for canteen at Douglas Castle Colliery, Douglas, to plans by R. J. Walker & Smith, 108, Douglas-st., Glasgow.

Lancashire.—E.C. propose alterations, etc., for feeding centres at additional schools, at £788.

Leicestershire. — E.C. propose additional school canteens, at £2,900.

Leigh.—E.C. approved school dining-halls at West Leigh and Plank-la. schools.

Northampton.—T.C. approved works canteen for Amhurst Mantle Co.

Sheffield.—T.C. propose staff canteen at Eyre-st., at £3,000.

Stourbridge.—T.C. propose dining-room at Hill-st. school.

Tyldesley.—U.D.C. approved sites for central dining halls for school children.

TENDERS

* Denotes *accepted*.
† Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modification*.
¶ Denotes *accepted by H.M. Government departments*.

Dearne.—For storm water sewer and ancillary works, for U.D.C. Wm. H. Adams, E. & S.:—
Pridmore & Broadhead, Ltd., Doncaster.
Luther Mortimer, Hebden Bridge.
J. H. Gilbert, Ltd., Doncaster.
H. Hainsworth, Ltd., Wakefield.
Fred Pearson & Co., Ltd., Doncaster.
P. P. Taylor, Ltd., Doncaster.
Wm. Birch & Sons, Ltd., York.
O. Weaver & Sons, Ltd., Mexborough.
Abraham Graham & Son, Ltd., Huddersfield.
*G. Dew & Co., Ltd., Plato-st., Oldham.
(Subject to M.O.H. confirmation.)

Eccles.—Works for T.C. T. Elce, B.E. Building for nursery class, Lewis-st. school: *Ernest Tonge & Sons, Ltd., Station-st., Swinton, Manchester, £579; reinstatement of houses at (a) 29, Barton-la., and 49 and 51, Gilda Brook-rd.; (b) 58, Garden-st., and 51, Grange-dr., Monton; (c) 18 and 20, Gaskell-rd.; (d) 248 and 250, Barton-la: †(a) Starkey & Walker, Ltd., 4, Albert-sq., Manchester, £504; †(b) Richard Pugh & Co., Ltd., Middleton-rd., Rhodes, Middleton, Manchester, £727; †(c) S. J. Hodgkiss, Ltd., Longcauseway, Farnworth, nr. Bolton, £770; †(d) Ernest Tonge & Sons, Ltd., 36, Station-rd., Swinton, Manchester, £728. (Provisionally.)

Faringdon.—Construction of pumping house, for R.D.C. K. M. Hart, E. & S.:—R. H. Powis, Ltd., Wembley, £865; Wimpey & Co., Ltd., London, £585; *J. Knapp & Sons, Shrivenham, Faringdon, £590.

Hendon. — For strengthening overground shelters at the Garden Suburb, St. Agnes' R.C., All Saints' C.E., Childs Hill and Brent Modern schools, for B.C.: *H. Pickrill, Ltd., Wealdstone, £3,199.

Hereford.—Erection of workshop: *W. Bowes & Co., Ltd., Bath-rd., Hereford.

Lancashire.—Alterations, etc., for school meals, for E.C. A. T. Nicholson (F.), County Architect, County-bldgs., Fishergate-hill,

Preston. Walton-le-Dale Brownedge R.C. Boys', Girls' and Infants' school; Higher Walton C.E. school; Bamber Bridge St. Aidan's C.E. and R.C. schools: *T. Mather, 7, Church-st., Higher Walton, Bamber Bridge, Preston; Sabden school: *J. Bertwistle & Son, Ltd., Railway Saw Mills, Padiham, nr. Burnley; Maghull Hostel cooking depot and Huyton Hostel cooking depot: *C. Seward & Co., Ltd., West View Works, Preston; Little Lever Senior and Worsley Hulton East schools: *Allen & Welsby, 7, Bolton-rd., Walkden, nr. Manchester; Newton-le-Willows The Manor (Mixed) C.E. schools: *H. Horridge & Co., Ltd., Wargrave-rd., Earlestown, Newton-le-Willows; Croft school: *John F. Gibbons, Culcheth, nr. Warrington.

¶**London (Air Ministry).**—The Directorate of Contracts has placed the following new contracts to value of £500 or over for week ended May 13, 1944.

Building work: A. J. Dunning & Sons, Weyhill, near Andover.

Civil engineering work: Fitzpatrick & Son (Ctirs.), Ltd., London, E.3; Geo. Wimpey & Co., Ltd., Denham, Uxbridge.

General maintenance work: J. Cryer & Sons, Fleetwood, Lancs.

Structural steelwork: Tees Side Bridge and Engineering Works, Ltd., Middlesbrough.

Heating work: Young, Austen and Young, Ltd., Mill Hill, N.W.7.

Agricultural work: A. Gordon, Ltd., Montrose.

Painting work: J. Arundel & Co. (Louth), Ltd., Louth; A. Sharrocks, Rochdale, Lancs; and C. and T. Painters, Harlesden, N.W.10.

Surfacing work: Penmaenmawr and Trinidad Lake Asphalte Co., Ltd., Blundellsands, Liverpool, 23.

Erection work: Sinclairs Steel Erectors, Ltd., Stratford-rd., Manchester.

¶**London (War Dept.).**—Works contracts placed by War Dept. for weeks ended May 6:—

Yorks: Hutting (erection) and miscellaneous work, J. H. Gilbert, Ltd., Doncaster.

Lancs: Miscellaneous work, Walter Peak, Warrington, Lancs.

Notts: Building and miscellaneous work, J. H. Brough & Co. (Builders), Ltd., Beeston, Notts.

Warwickshire: Miscellaneous work, A. Langley, Ltd., Birmingham.

Herts: Miscellaneous work, E. S. Gates, Little Chalfont, Bucks.

London: Miscellaneous work, Thorogood & Sons, Surbiton, Surrey.

Glamorgan: Miscellaneous work, Copp Bros., Ltd., Barry, Glamorgan.

Somerset: Hutting (erection), W. J. Pople & Sons, Ltd., Burnham-on-Sea, Somerset.

Kent: Miscellaneous work, E. W. Ballard, Rainham, Kent.

Middlesbrough.—Repairs to flat roofs at Kirby Secondary school, for E.C.: *John Cooke & Son (Huddersfield), Ltd., £360.

Middleton.—Erection of prefabricated building for canteen at Parish C.E. school. J. Pollard (L.), B.E.: *Ashton Smethurst (Builders), Ltd., Salfield-st., Middleton, nr. Manchester, £1,119.

Newcastle-on-Tyne.—Erection of nursery at Cruddas recreation ground, for City Council. R. G. Roberts, City Architect, 18, Cloth Market: *E. Jeffcock (Contractors), Ltd., Newburn-on-Tyne, £3,714.

Newcastle-on-Tyne.—For painting of houses, for City Council: *H. J. Sinclair, Heaton-rd., Newcastle, 291 houses at Walker estate, £1,292; *A. Robertson & Son, Leazes Park-rd., Newcastle, 264 houses at Pottery Bank estate, £1,170; *J. A. Coates, May-av., Ryton-on-Tyne, 280 houses at Two Ball Lonnen, £1,275; *M. Alexander & Son, Haymarket-la., Newcastle, partial painting of 375 houses at Two Ball Lonnen, £840, and 202 houses at Cowgate estate, £480; *J. Forster & Son, Bentinkrd., Newcastle, 223 houses at Cowgate estate, £567 10s.

Northumberland.—C.C. propose provision of ante- and post-natal hostel and residential nursery, at £6,000.

Sheffield.—Reinstatement of houses at (a) 91, Sheaf-gdns.; (b) 81, Albert-rd.; (c) 7, Grange-rd.; (d) 34, Gatefield-rd.; for T.C. W. George Davies (F.), City Architect: *(a) T. H. Bestall, Broomspring-la. (10), £416; *(b) A. & M. Higton, 17, Moor View-rd. (8), £258; *(c) H. E. Mottram, 14, Reed-st. (3), £878; *(d) H. Haywood, 354, Loxley-rd., Owlerton (6), £648; (all of Sheffield).

Swinton and Pendlebury.—Construction of culvert, removal of excavation and filling in over culvert, for T.C. A. Cordwell, B.S.: *J. Gerrard & Sons, Ltd., Pendlebury-rd., Swinton, Manchester.

FEDERATION OF MASTER BUILDERS

UNITE FOR STRENGTH

FEDERATION OF MASTER BUILDERS

MEMBERSHIP 1941 – 856

MEMBERSHIP 1942 — 1,612

MEMBERSHIP TO DATE — 3,600

LONDON REGION 37 AREA OFFICES

PROVINCIAL BRANCHES

BATH, BRISTOL, EXETER, FROME, MANCHESTER, MERSEYSIDE, PLYMOUTH, PORTSMOUTH, SALISBURY and TORQUAY.
(Many Branches in course of formation)

SUBSCRIPTION £3 . 3 . 0 p.a.

'Phone or write
Secretary:
23, Compton Terrace, Upper St., N.1
CANonbury 2041/3

BRONZE METAL WORK FOR BANKS, OFFICES, Etc.

W. & R. LEGGOTT Ltd.

WINDOW OPENING GEAR

26, Bloomsbury Way
LONDON, W.C.1
BRADFORD & MANCHESTER

BUCHANAN & CURWEN LTD.
ELECTRICAL WORK
Schemes prepared for
ARCHITECTS
engaged on Post-War Planning
ADDRESS:
66, VICTORIA STREET, S.W.1
Tel.: VICtoria 6550
Also at BRISTOL & LEATHERHEAD
EST. 1895

HARDWOOD FLOORING
STEVENS & ADAMS LTD.
Point Pleasant, Wandsworth, S.W.18

Boyle's Patent "Air-Pump" Ventilator
OVER TWO MILLION IN USE
ROBERT BOYLE & SON,
Ventilating Engineers, Emergency Address: 34 MORLAND AV., E. CROYDON, SURREY. Tel.: Addiscombe 1133

A·R·P CONSTRUCTION
W. & M. NEGUS, LTD.
Station Works, KING JAMES ST. SOUTHWARK S.E.1.
WATerloo 5474.

GALBRAITH
BROTHERS LIMITED
BUILDERS
CONTRACTORS
& ENGINEERS
of
CAMBERWELL
Temporary Offices: 15-16, TORRINGTON COURT, WESTWOOD HILL, S.E.26
Telephone: SYD. 6235/6